



EPA Region 5 Records Ctr.



264289

September 29, 2005

FEDERAL EXPRESS

Mrs. Mila V. Bensing
U.S. Environmental Protection Agency
Emergency Enforcement & Support Section (SE-5J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Re: Response to Request for Information Pursuant to Section 104(e) of CERCLA/IWI Inc.
Superfund Site, Summit, Illinois (the "IWI Site" or the "Site")

Dear Mrs. Bensing:

This letter responds on behalf of Houghton International Inc. ("Houghton") to the U.S. Environmental Protection Agency ("EPA") information request, dated August 18, 2005 (the "Request") concerning the above-referenced Superfund Site. As memorialized by e-mail correspondence of September 12, 2005, from Jeffrey N. Hurwitz, counsel to Houghton, to Mr. Jerome Kujowa, EPA Assistant Regional Counsel, we understand that EPA granted a very brief extension to respond to EPA's Request, until on or about September 30, 2005.

We also understand that EPA has a limited number of documents which it believes evidence transactions between Houghton's Chicago plant and the Site. Mr. Hurwitz requested a copy of these documents during his discussions with Mr. Kujowa on September 8, 2005, but EPA has not provided them to date. We therefore cannot complete our investigation, and Houghton reserves the right to amend or supplement its response based on our review of the documents in EPA's possession. Further, we again request that EPA provide us with a copy of these materials. If necessary, please treat this as a formal Freedom of Information Act request pursuant to 5 U.S.C. § 552.

Before responding to EPA's Request, we wish to point out some of the other difficulties in answering EPA's specific inquiries. We understand from Mr. Hurwitz's discussions with Mr. Kujowa that EPA is focused on activities that occurred primarily during the 1960s, 1970s, and perhaps into the early 1980s. EPA therefore seeks information pertaining to a time period spanning parts of three decades and ending 25 years ago. This makes a records search difficult. Houghton generally does not retain records of service transactions for this length of time.

There is only one Houghton manufacturing plant that is potentially relevant to EPA's Request,

which is located in Chicago, Illinois.¹ Despite a diligent investigation during the limited time provided by EPA, we have located no documents at either our Chicago plant or at Houghton's corporate headquarters in Valley Forge, Pennsylvania that evidence any arrangements for waste disposal or treatment at the IWI Site or any transactions at all with the Site. Notwithstanding EPA's focus on the period indicated above, we also reviewed our files containing more recent records, through the date when we understand the Site ceased operations in 1999. Further, our review included a search for documents referencing the principal of the Site owner (Glen Wellman) (sp.) or the other corporate names for IWI Inc. identified by Mr. Kujowa during his discussions with Mr. Hurwitz ("Itasco" and "Welco") (sp.). This search likewise revealed no documents.

Also, to the best of our knowledge, all employees who worked for Houghton who would have had knowledge of specific disposal or related practices at the Chicago plant during the 1960s and 1970s and into the early 1980s are no longer employed by Houghton. This adds yet another layer of complexity in responding to EPA.

Despite these challenges, we nonetheless respond to EPA's Request based on current information and belief formed after reasonable, good faith inquiry. Before doing so, Houghton asserts the following privileges and objections with regard to EPA's Request and each question therein, in addition to any objections raised in our specific responses to EPA's inquiries:

A. Houghton objects to any requirement to produce documents or information already in the possession of a government agency or already in the public domain.

B. Houghton asserts all applicable privileges it has with regard to EPA's enumerated inquiries, including, without limitation, the attorney-client privilege, work product privilege, the privilege related to materials generated in anticipation of litigation, and privileges for materials which are proprietary, company confidential, or trade secret.

C. Houghton objects to the definitions in the Request and to any and all of the enumerated inquiries on the grounds that they use undefined terms and are overly-broad, vague, ambiguous, irrelevant and unduly burdensome, and otherwise exceed statutory authority under applicable law, including, without limitation, the federal Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§ 9601 *et seq.* ("CERCLA"), and contravene Houghton's constitutional rights.

D. Houghton objects to any requirement that it continually supplement this response, because CERCLA does not authorize such an ongoing interrogatory by EPA. If more information is desired, Houghton respectfully requests further reasonable notice that such information is desired.

¹ The Chicago plant was the only Houghton plant located within hundreds of miles of the IWI Site during IWI's period of operation. As a general practice, Houghton's plants do not use disposal or recycling facilities that are not located within close proximity to a given plant.

E. Houghton objects to the Request's definitions of "you," "Respondent," and "person" because these terms are overly-broad and it is not possible for Houghton to answer EPA's questions on behalf of all persons encompassed by the definitions.

F. Houghton also objects to the definitions of "you" and "Respondent" on the grounds that these terms are defined in the Request to mean IWI Inc. Houghton cannot answer questions on behalf of IWI Inc. In responding to EPA's Request, we assume that you intended to define "you" and "Respondent" as Houghton.

G. Houghton objects to the request's definition of "identify" with respect to a natural person, on the grounds that it is unduly burdensome, duplicative, and irrelevant to the extent that it requires the disclosure of the person's home address and home telephone number. This may also impinge on privacy obligations under federal or State law. In response to EPA's requests, Houghton generally identifies natural persons by setting forth the person's name, title, business address, and business telephone number.

H. Houghton objects to the Request's instruction that former employees and agents of Houghton be interviewed on the grounds that it is unduly burdensome and overly-broad, and exceeds statutory authority under applicable law, including, without limitation, CERCLA.

Without waiving any of the objections or privileges described above, Houghton submits the following responses to EPA's enumerated requests.

1. Identify all persons consulted in the preparation of the answers to these Information Requests.

John W. Schroeder, Director of Manufacturing and Purchasing
Houghton International Inc.
Madison & Van Buren Avenues
P.O. Box 930
Valley Forge, PA 19482-0930
Business phone: 610.666.4058

John Livaich, Divisional Sales Manager
Houghton International Inc.
6600 S. Nashville Avenue
Chicago, IL 60638
Business phone: 773.767.6760

Linda Soprych, Office Manager
Houghton International Inc.
6600 S. Nashville Avenue
Chicago, IL 60638
Business phone: 773.767.6760

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Our attorneys at the firm of Morgan Lewis & Bockius LLP, principally Jeffrey N. Hurwitz, Esq., provided legal counsel. The business address and phone number for Mr. Hurwitz is:

Morgan Lewis & Bockius LLP
1701 Market Street
Philadelphia, PA 19103-2921
215.963.5700

In general, Mr. Schroeder was consulted in responding to all of EPA's inquiries. Mr. Livaich assisted in responding to inquiry Nos. 6, 7, and 12. Ms. Soprych assisted in reviewing files.

EPA is requested to direct future correspondence regarding this matter to the undersigned, Mr. John W. Schroeder, with a copy to counsel. Also, we request that any EPA effort to contact Mr. Schroeder, Mr. Livaich, or Ms. Soprych be made through Houghton's counsel.

2. Identify all documents consulted, examined, or referred to in the preparation of the answers to these Requests, and provide copies of all such documents.

The principal documents Houghton consulted or examined in the preparation of this response or that are otherwise referred to herein are listed below:

- third party vendor/service files at Houghton's Chicago plant and corporate headquarters. None of these documents identified or referenced the IWI Site, and, as a result, they are neither relevant nor responsive to EPA's Request.

- records of offsite waste shipments at Houghton's Chicago plant. None of these documents identified or referenced the IWI Site, and, as a result, they are neither relevant nor responsive to EPA's Request.

- personnel files of the two former Houghton employees identified by EPA's counsel during telephone discussions with Mr. Hurwitz. The release of these files may impinge on privacy or other obligations under federal or State law, and do not reference or relate to the Site. Therefore, they are not provided.

- Toxic Chemical Release Inventory Forms under Section 313 of the federal Emergency Planning and Community Right-to-Know Act ("Form Rs" and "Form As") pertaining to the Chicago plant for the period 1987-1999. None of these Forms identify or reference the IWI Site, and, as a result, they are neither relevant nor responsive to EPA's Request. Further, these documents are already in the public domain.

- Houghton Annual Reports for calendar years 2000 through 2004 (attached at Appendix A hereto).

-- Amended and Restated Articles of Incorporation, Articles of Amendment-Domestic Business Corporation, and Bylaws (attached at Appendix B hereto).

Houghton also reviewed the 1987-1999 Tier II Emergency and Chemical Inventory Forms for the Chicago plant prepared pursuant to Section 312 of the federal Emergency Planning and Community Right-to-Know Act. These forms were examined as part of our review of raw materials that may have been present at the Chicago plant. However, because we have no information indicating that Houghton conducted business with the IWI Site during this period (1987-1999), these documents are neither relevant nor responsive to EPA's request. Further, they are already in the public domain. We nonetheless include a summary of the raw materials identified in these Tier II forms in our response to EPA inquiry No. 7 below.

3. If you have reason to believe that there may be persons able to provide a more detailed or complete response to any Information Request or who may be able to provide additional responsive documents, identify such persons.

Houghton objects to this request as being overly-broad and unduly burdensome, because EPA's inquiry is not limited to Houghton employees. Without waiving this or the general objections stated above, Houghton provides the following response:

We have no direct knowledge of any persons who may be able to provide a more detailed or complete response or who may be able to provide additional responsive documents. EPA has informed us that it has a small number of documents dating from 1977-1981 that purport to identify two individuals (Harry Scott and Dennis Skorsky) that EPA believes may have knowledge of the IWI Site. As previously noted, EPA has not provided us with a copy of these documents. The individuals identified by EPA are no longer employed by Houghton, and we cannot complete our investigation with respect to this matter until we have a copy of these documents.

4. List the EPA Identification Numbers of the Respondent.

Houghton objects to this request because it is vague, ambiguous and overly-broad. EPA's reference to "Identification Numbers" is unclear, and the request appears to seek information pertaining to all Houghton facilities, regardless of whether they are located within the same geographic vicinity as the IWI Site. In this latter regard, the request is not reasonably tailored to lead to information relevant to the IWI Site.

Without waiving these or the general objections stated above, and assuming that the term, "EPA Identification Number," refers to the number issued by EPA pursuant to the federal Resource Conservation and Recovery Act ("RCRA"), the current RCRA I.D. number assigned to Houghton's Chicago plant is ILD001738277.

5. Identify the acts or omissions of any persons, other than your employees, contractors, or agents, that may have caused the release or threat of release of hazardous substances, pollutants, or contaminants, and damages resulting therefrom.

Houghton objects to this request because it (i) is overly-broad and unduly burdensome in that it seeks information regarding all persons, including those not employed or retained by Houghton, (ii) is vague and ambiguous in that it does not identify the IWI Site or any other location at which the release or threatened release is alleged to have occurred, and (iii) seeks conclusions of law regarding the status of persons as agents and the status of materials as hazardous substances, pollutants or contaminants. It also requests that Houghton speculate as to whether acts or omissions "may" have caused the described conditions. Notwithstanding this and the general objections stated above, we provide the following response:

Houghton does not have documents or other information responsive to EPA's inquiry.

6. Identify all persons having knowledge or information about the generation, transportation, treatment, disposal, or other handling of hazardous substances by you, your contractors, or by prior owners and/operators.

Houghton objects to this request because it is overly-broad and unduly burdensome in that (i) it seeks information regarding all persons, including those not employed or retained by Houghton, (ii) appears to pertain to Houghton's manufacturing facilities regardless of location, even if far removed from the Site, and (iii) is not limited to any particular time period. It is therefore not reasonably tailored to lead to information relevant to the IWI Site. It also seeks conclusions of law regarding the status of materials as hazardous substances. Further, the request is vague and ambiguous, in that the reference to "prior owners and/operators" is unclear.

Without waiving these or the general objections stated above, we provide the following response:

The principal, current Houghton employees who may have knowledge or information pertaining to the identified activities, if any, in connection with Houghton's Chicago plant are Mr. Schroeder and Mr. Livaich. Titles, business addresses and phone numbers for these individuals are provided in our response to EPA inquiry No. 1 above. We request that any EPA effort to contact these individuals be made through Houghton's counsel.

7. Did you ever use, purchase, store, treat, dispose, transport or otherwise handle hazardous substances or materials? If the answer to the preceding question is anything but an unqualified "no", identify:

- a) The chemical composition, characteristics, physical state (e.g., solid, liquid) of each hazardous substance;**
- b) Who supplied you with such hazardous substances;**

c) How such hazardous substances were used, purchased, generated, stored, treated, transported, disposed, or otherwise handled by you;

d) When such hazardous substances were used, purchased, generated, stored, treated, transported, disposed, or otherwise handled by you;

e) Where such hazardous substances were used, purchased, generated, stored, treated, transported, disposed, or otherwise handled by you; and

f) The quantity of such hazardous substances used, purchased, generated, stored, treated, transported, disposed or otherwise handled by you.

Houghton objects to each and all of these inquiries on a number of grounds. They are overly-broad and unduly burdensome in that they seek detailed information on complex manufacturing processes, raw materials, suppliers, wastes, and related data over an unspecified time period, and appear to pertain to manufacturing facilities regardless of location, even if far removed from the IWI Site. They are therefore not reasonably tailored to lead to information relevant to the Site. They also seek conclusions of law, including legal conclusions regarding the status of materials as hazardous substances or whether such hazardous substances were "treated." In general, as is true of most manufacturing operations, Houghton uses numerous raw materials, and it would be unduly burdensome and unreasonable to require Houghton to identify whether each of these raw materials may contain hazardous substances and to provide the detailed data requested by EPA and apparently covering all Houghton operations in the United States. In addition, raw material suppliers, formulations, material usage, handling and waste disposal practices have changed over time, and we lack historic documentation in this regard for EPA's principal period of interest (1960s-early 1980s). Nor do we have historic documentation regarding when raw materials were used.

Without waiving these or the general objections stated above, and without admitting that a particular raw material contained hazardous substances, or that we engaged in any specific activity described above, Houghton provides the following responses with respect to its Chicago plant. For some of EPA's inquiries, we provide further, specific objections.

a) The Houghton Chicago plant blends hydrotreated naphthenic and paraffinic based mineral oils with other substances for use as lubricants and hydraulic and metalworking fluids. Houghton's product lines and ingredients have changed over time. The plant has used numerous raw materials in its manufacturing processes, described below.

The number of raw materials used at the Chicago plant has been reduced in recent years as product lines have narrowed. Principal raw materials used include mineral oils, ethylene glycol or mixtures of ethylene glycol or diethylene glycol with polyoxylalkylene and polyalkylene, kerosene, mono- and triethanolamine, and polyalkylene glycol. The Tier Two

Emergency and Hazardous Chemical Inventory Forms for the Chicago plant also indicate the presence of the following raw materials: formalin (1987); potassium nitrate (1987-1994); barium chloride (1987-1991); sodium nitrite (1987-1993); sodium nitrate (1987-1994); caustic soda (1987-1991); isopropylaminoethanol mixtures (1987-1990, 1992-1993); various solvent mixtures (1987-1990); diethylethanolamine (1987-1988); stoddard solvent (1987-1992); n-pelargonic acid (1989-1994); sebacic acid (1988-1989); phosphoric acid (1991); amine phosphate ester (1994-1995); and canola oil (2004). Most of these raw materials are in liquid form, although the sodium and chloride salts, boric acid, paraffin wax, styrene hydrocarbon polymer, neopentyl glycol, and trimethylpropane, are solids.

With respect to EPA's request regarding the "characteristics" of these raw materials, this inquiry is vague and ambiguous, as well as overly-burdensome. Further, it is not reasonably tailored to lead to information relevant to the IWI Site.

b) Among other grounds, Houghton objects to this inquiry, because it is not reasonably tailored to lead to relevant information. The identity of Houghton's raw material suppliers is unrelated to and has no bearing on conditions or other factors pertaining to the IWI Site. Further, raw material suppliers at the Chicago plant have changed over time, and we lack historic documentation in this regard for EPA's principal period of interest (1960s-early 1980s).

c) Among other grounds, Houghton objects to this inquiry because it is vague and ambiguous and not reasonably tailored to lead to information relevant to the Site. For example, "how" hazardous substances are purchased or stored are unrelated to and have no bearing on conditions or other factors pertaining to the IWI site. Without waiving these or the other specific and general objections stated above, Houghton provides the following response:

Raw material suppliers, formulations, material usage, handling and waste disposal practices have changed over time, and we lack historic documentation in this regard for EPA's principal period of interest (1960s-early 1980s). Further, we have located no documents regarding waste disposal or other transactions with the IWI Site during any time period. In general, the Houghton Chicago plant uses raw materials by blending hydrotreated napthenic and paraffinic based mineral oils with other substances for use as lubricants and hydraulic and metalworking fluids. Raw materials are generally stored in drums or aboveground storage tanks in designated areas of the facility.

The principal waste streams generated at the Chicago plant result from the rinsing of process and related tanks and equipment, such as piping, hoses, and pumps. The oil-based component of these wastestreams is separated from the aqueous component, and shipped to authorized reclamation facilities for recycling and resale. Following pH or other adjustment, the water-based component is discharged to the sanitary sewer pursuant to a duly-issued permit from the local municipality. Based on information and belief, the same or similar waste disposal practices were utilized in the past in compliance with then-applicable law. Further, the Chicago plant generates little waste defined as hazardous under RCRA.

With respect to empty raw material or product drums and bins that require reconditioning, based on information and belief, historically, the Chicago plant used a reconditioning company other than IWI as its principal reconditioning service. Houghton's relationship with this latter company just recently terminated. Also, because raw material drums contain economically valuable ingredients used in the manufacture of Houghton's products, we expect that every effort would have been made to use these raw materials completely and to thoroughly empty each drum, as is the case today. Similarly, product drums or bins returned from customers during the relevant period would also have contained valuable products, and we likewise would expect that these drums or bins would have been empty.²

d) Among other grounds, Houghton objects to this inquiry because it is not reasonably tailored to lead to information relevant to the Site. For example, the dates of raw material use, purchase, or storage are unrelated to and have no bearing on conditions or other factors pertaining to the IWI Site. Without waiving these and the other specific and general objections stated above, Houghton provides the following response:

Raw material suppliers, formulations, material usage, handling and waste disposal practices have changed over time, and we lack historic documentation in this regard for EPA's principal period of interest (1960s-early 1980s). Further, we have located no documents regarding waste disposal or other transactions with the IWI Site during any time period. However, in general, the Chicago plant purchases, stores, uses and processes raw materials on a regular basis. Offsite disposal or shipment for reclamation is periodic.

e) Raw materials are used, stored, and processed at the Houghton Chicago plant. Raw material suppliers, formulations, material usage, handling and waste disposal practices have changed over time, and we lack historic documentation in this regard for EPA's principal period of interest (1960s-early 1980s). Further, we have located no documents regarding waste disposal or other transactions pertaining to the IWI Site during any time period.

f) Raw material suppliers, formulations, material usage, handling and waste disposal practices, have changed over time, and we lack historic documentation in this regard for EPA's principal period of interest (1960s-early 1980s). Further, we have located no documents regarding waste disposal or other transactions pertaining to the IWI Site during any time period.

8. Provide copies of all income tax returns sent to the Federal Internal Revenue Service in the last five years.

Houghton objects to this inquiry because it seeks documents that are in the public domain and it is not reasonably tailored to lead to information relevant to the IWI Site. Without waiving this objection or the general objections stated above, Houghton is providing its Annual Reports for the last five years (2000-2004). The Annual Reports contain summaries of Houghton's federal

² EPA has told us that the documents in its possession indicate that the bins described therein were not empty. Again, we have been denied the opportunity to review these documents.

income tax returns, along with other financial and related information.

9. If Respondent is a Corporation, respond to the following requests:

a) Provide a copy of the Articles of Incorporation and By-Laws of the Respondent.

Houghton objects to this request, because it is not reasonably tailored to lead to information relevant to the IWI Site. Without waiving this objection or the general objections stated above, Houghton is providing the Amended and Restated Articles of Incorporation of E.F. Houghton & Co., the Articles of Amendment-Domestic Business Corporation, and By-Laws.

b) Provide Respondent's audited financial statements for the past five fiscal years, including, but not limited to those filed with the Internal Revenue Service. If audited financial statements are not available, please state the reasons that they are not available, and provide the financial statements that management would review at the conclusion of each fiscal year.

Houghton objects to this inquiry, because it is not reasonably tailored to lead to information relevant to the IWI Site. Without waiving this objection or the general objections stated above, Houghton is providing its Annual Reports for the last five years (2000-2004). The Annual Reports contain Houghton's audited financial statements or summaries thereof.

c) Identify all of Respondent's current assets and liabilities and the persons who currently own or are responsible for such assets and liabilities.

Houghton objects to this request, because it is overly-burdensome and not reasonably tailored to lead to information relevant to the IWI Site. Further, it is vague and ambiguous, in that, among other grounds, it is unclear what is meant by the "persons who currently own or are responsible for such assets and liabilities." Houghton is a corporate entity separate and apart from the natural persons who are involved in its financial or other management. Without waiving these or the general objections stated above, Houghton is providing its Annual Reports for the last five years (2000-2004). These reports include information on the Company's assets and liabilities for the year covered by each report.

d) Provide a list of any investments that the Corporation may own. For example, any ownership in stock should list Corporate name, number of shares owned, and price at a current specific date. Ownership of real estate should itemize property location, type of property (land, office building, factory, etc.), size of property, purchase price, and current market valuation. These schedules should agree with financial presentations.

Houghton objects to this request because it is overly-broad, over-reaching, duplicative, unduly burdensome, and not reasonably tailored to lead to information relevant to the IWI Site.

Further, it is not necessary to assess the Company's financial status. The attached Annual Reports provide a full financial summary of the Company, including consolidated balance sheets listing the dollar value of Houghton's assets, investments, property, plant and equipment, along with liabilities and a consolidated statement of operations for each of the past five years.

10. If Respondent is a Partnership, provide copies of the Partnership Agreement.

Respondent is not a partnership, and this inquiry is not relevant to Houghton.

11. If Respondent is a Trust, provide all relevant agreements and documents to support this claim.

Respondent is not a partnership, and this inquiry is not relevant to Houghton.

12. Identify all persons, including yourself, who may have arranged for disposal or treatment or arranged for transportation for disposal or treatment of totes, containers, drums, barrels, pails, or waste materials, including hazardous substances, at the Site or to the Site or for transshipment through the Site. In addition, identify the following:

- a) The persons with whom you or such other persons made such arrangements, including, but not limited to [provide list of transporters];
- b) Every date on which such arrangements took place;
- c) For each transaction, the nature of the waste material or hazardous substance, including the chemical content, characteristics, physical state (e.g., solid, liquid) and the process for which the substance was used or the process which generated the substance which may have been stored in totes, containers, drums, barrels, or pails.
- d) The owner of the totes, containers, drums, barrels, pails, or waste materials or hazardous substances so accepted or transported;
- e) The quantity of the totes, containers, drums, barrels, pails, or waste materials or hazardous substances involved (weight or volume) in each transaction and the total quantity for all transactions;
- f) All tests, analyses, and analytical results concerning the totes, containers, drums, barrels, pails, or waste materials;
- g) The person(s) who selected the Site or transshipment of totes, containers, drums, barrels, pails, or waste materials through the Site as the place to which the waste materials or hazardous substances were to be transported;
- h) The amount paid in connection with each transaction, the method of

payment, and the identity of the person from whom payment was received;

i) Where the person identified in g. above intended to have such totes, containers, drums, barrels, pails, hazardous substances or waste materials transported and all evidence of this intent;

j) Whether the totes, containers, drums, barrels, pails, waste materials or hazardous substances involved in each transaction were transshipped through, or were stored or held at, any intermediate site prior to final treatment or disposal;

k) What was actually done to the totes, containers, drums, barrels, pails, waste materials or hazardous substances once they were brought to the Site;

l) The final disposition of each of the totes, containers, drums, barrels, pails, waste materials or hazardous substances in such transactions;

m) The measures taken by you to determine the actual methods, means, and site of treatment or disposal of the totes, containers, drums, barrels, pails, waste materials or hazardous substances involved in each transaction;

n) The type and number of totes, containers, drums, barrels or pails in which the waste materials or hazardous substances were contained when they were accepted for transport, and subsequently until they were deposited at the Site, and all markings on such totes, container, drums, barrels, pails, or containers;

o) The price paid for transport or disposal or treatment of each tote, container, drum, barrel, pail, waste material and hazardous substance;

p) All documents containing information responsive to a) - o) above, or in lieu of identification of all relevant documents, provide copies of all such documents;

q) All persons with knowledge, information, or documents responsive to a) – p) above.

Houghton objects to these inquiries because (i) they seek conclusions of law regarding the purported status of Houghton as an “arranger” and the status of materials as hazardous substances or wastes and (ii) they are overly-broad, unduly burdensome and unreasonable in that they seek information regarding all persons, including those not employed or retained by Houghton.

Without waiving these or the general objections stated above, we provide the following response:

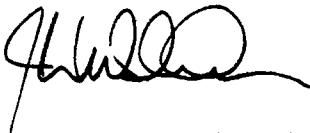
Houghton has no documents indicating that it ever made arrangements for the disposal or treatment of wastes at the IWI Site or for transshipment through the Site. Further, we have no

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direct knowledge of any such arrangements. EPA has informed us that it has a limited number of documents that purport to evidence transactions between Houghton's Chicago plant and the IWI Site during the period 1977-1981, but we have not been provided copies of these materials.

Should you have questions regarding any of the above, please contact our counsel in this matter, Mr. Jeffrey Hurwitz, at the address or phone number provided in our response to EPA inquiry No. 3.

Very truly yours,

A handwritten signature in black ink, appearing to read "J. Schroeder", with a stylized flourish at the end.

John W. Schroeder, Director of Manufacturing and Purchasing
Houghton International Inc.

Enclosures

c: Jerome Kujawa, Esq. (w/o enclosures)

APPENDIX A

Amended and Restated Articles of Incorporation of E.F. Houghton & Co., Articles of Amendment-Domestic Business Corporation, and By-Laws

**AMENDED AND RESTATED
ARTICLES OF INCORPORATION
OF
E. F. HOUGHTON & CO.**

- 1st. The name of the corporation is: E. F. Houghton & Co.
- 2nd. The location and post office address of the registered office of the corporation in this Commonwealth is:
Madison & Van Buren Avenues, Valley Forge, PA 19482
- 3rd. The corporation is incorporated under the Business Corporation Law of the Commonwealth of Pennsylvania for the following purpose or purposes:

The purpose or purposes for which the corporation is incorporated under the Business Corporation Law of the Commonwealth of Pennsylvania are to engage in, and to do any lawful act concerning, any or all lawful business for which corporations may be incorporated under said Business Corporation Law, including but not limited to, manufacturing, processing, owning, using and dealing in personal property of every class and description, engaging in research and development furnishing services, and acquiring, owning, using and disposing of real property of any nature whatsoever.

- 4th. The term for which the corporation is to exist is:
perpetual.

- 5th. The aggregate number of shares which the corporation shall have authority to issue is 3,000,000 shares, consisting of 500,000 shares of preferred stock of the par value of \$.50 per share and 2,500,000 shares of common stock of the par value of \$.50 per share.

A description of the preferred and common stock and a statement of the preferences, qualifications, limitations, restrictions, and the special or relative rights granted or imposed upon the shares of common and preferred stock are as follows:

- (a) The preferred stock is entitled, out of the net profits of each year when available, determined by the Board of Directors, to dividends at the rate of, but never exceeding, six percent per annum, payable quarterly, or at such other times as the Board of Directors shall determine, before any dividends shall be paid upon the common stock, but dividends on the preferred stock shall not be cumulative.

- (b) In the event of the dissolution of this corporation, or a distribution of its capital as distinguished from earnings, the preferred stock is entitled to receive in distribution fifty cents per share before anything is distributed upon the common stock, and the remaining proceeds of liquidation shall be distributed to the common stock alone.
- (c) The common stock is subject to the aforesaid prior rights of the preferred stock but if after the payment of any periodical dividend on the preferred stock there remain net profits determined by the Board of Directors as aforesaid, such net profits or those of any prior year or years for which full dividends have been paid upon the preferred stock, may be applied, when declared by the Board of Directors, to dividends upon the common stock.
- (d) The preferred stock may, at the discretion of the Board of Directors, be redeemed as a whole or in part by the payment to the registered holders thereof of fifty-three cents per share and any unpaid dividends which may have been declared prior to the resolution providing for redemption. The Board of Directors may prescribe the method for the exercise of the redemption provisions, and its action to that end shall be conclusive.
- (e) When any holder of preferred stock shall desire to sell the same he shall first offer it to the Board of Directors for this Corporation in writing at par, and the Board of Directors shall be at liberty to purchase the said stock as treasury stock at par, and the said stockholder shall not be at liberty to sell his stock to any other person, firm or corporation during the period of thirty days from the date of the said offer, or until this Corporation through its Board of Directors has expressed in writing its refusal to purchase the same within the said period.
- (f) The preferred and common stock are entitled to equal voting powers and are equal in all respects except as hereinbefore expressly provided.
- (g) For purposes of Section 611 of the Pennsylvania Business Corporation Law (as amended by the Act of July 20, 1968, P.L. 459, No. 216 § 37), the preferred stock and common stock of this Corporation are deemed to be classes of securities issued on or after June 16, 1942. The Corporation may issue shares, option rights, or securities having conversion or option rights, without first offering them to shareholders of any class or classes.

- 6th. (a) Directors and officers as fiduciaries. A director or officer of the corporation shall stand in a fiduciary relation to the Corporation and shall perform his or her duties as a director or officer, including his or her duties as a member of any committee of the board upon which he or she may serve, in good faith, in a manner he or she reasonably believes to be in the best interests of the corporation, and with such care, including reasonable inquiry, skill and diligence, as a person of ordinary prudence would use under similar circumstances. In performing his or her duties, a director or officer shall be entitled to rely in good faith on information, opinions, reports or statements, including financial statements and other financial data, in each case prepared or presented by (a) one or more officers or employees of the corporation whom the director or officer reasonably believes to be reliable and competent with respect to the matters presented, (b) counsel, public accountants or other persons as to matters that the director or officer reasonably believes to be within the professional or expert competence of such person, or (c) a committee of the board of directors upon which the director or officer does not serve, duly designated in accordance with law, as to matters within its designated authority, which committee the director or officer reasonably believes to merit confidence. A director or officer shall not be considered to be acting in good faith if he or she has knowledge concerning the matter in question that would cause his or her reliance to be unwarranted. Absent breach of fiduciary duty, lack of good faith or self-dealing, actions taken as a director or officer of the corporation or any failure to take any action shall be presumed to be in the best interests of the Corporation.
- (b) Personal liability of directors. A director of the corporation shall not be personally liable, as such, for monetary damages (including, without limitation, any judgment, amount paid in settlement, penalty, punitive damages or expense of any nature [including, without limitation, attorneys' fees and disbursements]) for any action taken, or any failure to take any action, unless the director has breached or failed to perform the duties of his or her office under these Articles, the By-laws of the corporation or applicable provisions of law and the breach or to perform constitutes self-dealing, willful misconduct or recklessness.

- (c) Personal liability of officers. An officer of the corporation shall not be personally liable, as such, to the corporation or its shareholders for monetary damages (including, without limitation, any judgment, amount paid in settlement, penalty, punitive damages or expense of any nature [including, without limitation, attorneys' fees and disbursements]) for any action taken, or any failure to take any action, unless the officer has breached or failed to perform the duties of his or her office under these Articles, the By-laws of the corporation or applicable provisions of law and the breach or failure to perform constitutes self-dealing, willful misconduct or recklessness.
- (d) Interpretation of Article. The provisions of (b) and (c) of this Article 6th shall not apply to the responsibility or liability of a director or officer, as such, pursuant to any criminal statute or for the payment of taxes pursuant to local, state or federal law. The provisions of this Article 6th have been adopted pursuant to the authority of Sections 204A(10) and 801 of the Pennsylvania Business Corporation Law, shall be deemed to be a contract with each director or officer of the Corporation who serves as such at any time while this Article is in effect, and such provisions are cumulative of and shall be in addition to and independent of any and all other limitations on the liabilities of directors or officers of the Corporation, as such, or rights of indemnification by the Corporation to which a director or officers of the Corporation may be entitled, whether such limitations or rights arise under or are created by any statute, rule of law, By-law, agreement, vote of shareholders or disinterested directors or otherwise. Each person who serves as director or officer of the corporation while this Article 6th is in effect shall be deemed to be doing so in reliance on the provisions of this Article. No amendment to or repeal of this Article 6th, nor the adoption of any provision of these Articles inconsistent with this Article, shall apply to or have any effect on the liability or alleged liability of any director or officer of the corporation for or with respect to any acts or omissions of such director or officer occurring prior to such amendment, repeal or adoption of an inconsistent provision. In any action, suit or proceeding involving the application of the provisions of this Article 6th, the party or parties challenging the right of a director or officer to the benefits of this Article shall have the burden of proof.

- 7th. These articles of incorporation may be amended in the manner now or hereafter prescribed by statute, and all rights conferred upon shareholders therein are granted subject to this reservation.

Microfilm Number _____

Filed with the Department of State on MAR 23 1991

Entity Number 166052

[Signature]
Secretary of the Commonwealth NO

ARTICLES OF AMENDMENT-DOMESTIC BUSINESS CORPORATION

DSCB:15-1915 (Rev 91)

In compliance with the requirements of 15 Pa.C.S. § 1915 (relating to articles of amendment), the undersigned business corporation, desiring to amend its Articles, hereby states that:

1. The name of the corporation is: E. F. Houghton & Co.

2. The (a) address of this corporation's current registered office in this Commonwealth or (b) name of its commercial registered office provider and the county of venue is (the Department is hereby authorized to correct the following information to conform to the records of the Department):

Number and Street	City	State	Zip	County
Madison and Van Buren Avenues	Valley Forge	PA	19482	Montgomery

(b) c/o: _____
Name of Commercial Registered Office Provider _____ County _____

For a corporation represented by a commercial registered office provider, the county in (b) shall be deemed the county in which the corporation is located for venue and official publication purposes.

3. The statute by or under which it was incorporated is: Act of April 29, 1874, entitled "An act to provide for the incorporation and regulations of certain corporations," as supplemented.

4. The date of its incorporation is: March 8, 1910

5. (Check, and if appropriate complete, one of the following):

☒ The amendment shall be effective upon filing these Articles of Amendment in the Department of State.

☐ The amendment shall be effective on: _____ at _____
Date Hour

6. (Check one of the following):

☐ The amendment was adopted by the shareholders (or members) pursuant to 15 Pa.C.S. § 1914(a) and (b).

☒ The amendment was adopted by the board of directors pursuant to 15 Pa.C.S. § 1914(c).

7. (Check, and if appropriate complete, one of the following):

☒ The amendment adopted by the corporation, set forth in full, is as follows:

RESOLVED, that Article One of the Articles of Incorporation shall be amended as follows: The name of the corporation is Houghton International Inc.

☐ The amendment adopted by the corporation is set forth in full in Exhibit A attached hereto and made a part hereof.

93 MAR 23 PM 12:30

93 APR -1 PM 4:03

8. (Check if the amendment restates the Articles):

☐ The restated Articles of Incorporation supersede the original Articles and all amendments thereto.

IN TESTIMONY WHEREOF, the undersigned corporation has caused these Articles of Amendment to be signed by duly authorized officer thereof this 22 day of March, 1993.

E. F. Houghton & Co.

(Name of Corporation)

BY: 

(Signature)

TITLE: Vice President/Secretary-Treasu

**AMENDED AND RESTATED
BY-LAWS
Of
HOUGHTON INTERNATIONAL INC.**

**INCORPORATED UNDER THE LAWS OF THE
COMMONWEALTH OF PENNSYLVANIA
ON MARCH 8, 1910**

As amended through January 21, 2005

AMENDED AND RESTATED BY-LAWS Of HOUGHTON INTERNATIONAL INC.

(a Pennsylvania corporation formerly known as E.F. Houghton & Co.)

ARTICLE I.

OFFICES AND FISCAL YEAR

Section 1.01. Registered Office. The registered office of the corporation in the Commonwealth of Pennsylvania shall be at Madison and Van Buren Avenues, Valley Forge, PA 19482 until otherwise established by a vote of a majority of the Board of Directors, and a statement of such change is filed with the Department of State.

Section 1.02. Other Offices. The corporation may also have offices at such other places within or without the Commonwealth of Pennsylvania as the Board of Directors may from time to time appoint or the business of the corporation may require.

Section 1.03. Fiscal Year. The fiscal year of the corporation shall begin on the first day of January in each year.

ARTICLE II.

MEETINGS OF SHAREHOLDERS

Section 2.01. Place of Meeting. Except as otherwise provided in this section, all meetings of the Shareholders of the corporation shall be held at the registered office of the corporation or such other geographic location as may be designated by the Board of Directors in the notice of such meeting. If a meeting of Shareholders is held by means of the Internet or other electronic technology pursuant to which the Shareholders have an opportunity to read or hear the proceedings substantially concurrently with their occurrence, vote on matters submitted to the Shareholders and pose questions to the Directors, the meeting need not be held at a particular geographic location.

Section 2.02. Annual Meeting. The Board of Directors may fix the date and time of the annual meeting of the Shareholders, but if no such date and time is fixed by the Board, the meeting for any calendar year shall be held on the second Tuesday of April in such year, if not a

legal holiday under the laws of Pennsylvania, and, if a legal holiday, then on the next succeeding business day, not a Saturday, at 11:00 o'clock AM, and at said meeting the Shareholders then entitled to vote shall elect Directors and shall transact such other business as may properly be brought before the meeting. If the annual meeting shall not have been called and held within six months after the designated time, any Shareholder may call such meeting at any time thereafter.

Section 2.03. Special Meetings. Special meetings of the Shareholders of the corporation for any purpose or purposes may be called at any time by the Chairman of the Board or by the Board of Directors, or by Shareholders entitled to cast at least one-fifth of the votes which all Shareholders are entitled to cast at the particular meeting.

At any time, upon written request of any person or persons who have duly called a special meeting, which written request shall state the object of the meeting, it shall be the duty of the Secretary to fix the date of the meeting to be held at such date and time as the Secretary may fix, not more than sixty days after the receipt of the request. If the Secretary shall neglect or refuse to fix the date and time of such meeting, the person or persons calling the meeting may do so.

Section 2.04. Notice of Meetings of Shareholders.

(a) General Rule. Written notice of every meeting of the Shareholders shall be given by, or at the direction of, the Secretary or other authorized person to each Shareholder of record entitled to vote at the meeting at least (1) ten days prior to the day named for a meeting (and, in case of a meeting that will consider a merger, consolidation, share exchange or division, to each Shareholder of record not entitled to vote at the meeting) that will consider a fundamental change under 15 Pa.C.S. Chapter 19, or (2) five days prior to the day named for the meeting in any other case. If the Secretary or other authorized person neglects or refuses to give notice of a meeting, the person or persons calling the meeting may do so. In the case of a special meeting of Shareholders, the notice shall specify the general nature of the business to be transacted.

(b) Notice of Action by Shareholders on By-Laws. In the case of a meeting of Shareholders that has as one of its purposes action on these By-Laws, written notice shall be given to each Shareholder that the purpose, or one of the purposes, of the meeting is to consider the adoption, amendment or repeal of these By-Laws. There shall be included in, or enclosed with, the notice a copy of the proposed amendment or a summary of the changes to be effected thereby.

(c) Notice of Action by Shareholders on Fundamental Change. In the case of a meeting of the Shareholders that has as one of its purposes action with respect to any fundamental change under 15 Pa.C.S. Chapter 19, each Shareholder shall be given, together with written notice of the meeting, a copy or summary of the amendment or plan to be considered at the meeting in compliance with the provisions of Chapter 19.

(d) Notice of Action by Shareholders Giving Rise to Dissenters Rights. In the case of a meeting of the Shareholders that has as one of its purposes action that would give rise to dissenters rights under the provisions of 15 Pa.C.S. Subchapter 15D, each Shareholder shall be given, together with written notice of the meeting:

(1) a statement that the Shareholders have a right to dissent and obtain payment of the fair value of their shares by complying with the provisions of Subchapter 15D (relating to dissenters rights); and

(2) a copy of Subchapter 15D.

Section 2.05. Quorum, Manner of Acting and Adjournment. The presence in person or by proxy of Shareholders entitled to cast a majority of the votes which all Shareholders are entitled to cast on the particular matter shall constitute a quorum for the purpose of considering such matter. Treasury shares shall not be counted in determining the total number of outstanding shares for voting purposes at any given time. The Shareholders present in person or by proxy at a duly organized meeting can continue to do business until adjournment, notwithstanding withdrawal of enough Shareholders to leave less than a quorum.

If a meeting cannot be organized because a quorum has not attended, the Shareholders entitled to vote and present in person or represented by proxy may adjourn the meeting to such time and place as they may determine. At any such adjourned meeting at which a quorum may be present such business may be transacted as might have been transacted at the meeting as originally called. In case of any meeting called for the election of Directors, those who attend the second of such adjourned meetings, although less than a quorum, shall nevertheless constitute a quorum for the purpose of electing Directors. Any meeting at which Directors are to be elected shall be adjourned only from day to day, or for such longer periods not exceeding fifteen days each, as may be directed by a majority of the Shareholders who are present in person or by proxy and entitled to vote at such meeting, until such Directors are elected. When a meeting of Shareholders is adjourned, it shall not be necessary to give any notice of the adjourned meeting or of the business to be transacted at an adjourned meeting, other than by announcement at the meeting at which the adjournment is taken, unless the Board of Directors fixes a new record date for the adjourned meeting in which event notice shall be given in accordance with Section 2.04(a).

Except as otherwise specified in the Articles or these By-Laws or provided by statute, the acts, at a duly organized meeting, of the Shareholders present, in person or by proxy, entitled to cast at least a majority of the votes which all Shareholders present in person or by proxy are entitled to cast, shall be the acts of the Shareholders.

Section 2.06. Organization. At every meeting of the Shareholders, the Chairman of the Board, if there be one, or in the case of vacancy in office or absence of the Chairman of the Board, one of the following persons present in the order stated: the Vice Chairman of the Board, if there be one, the President, the Vice Presidents in their order of rank and seniority, or a person chosen by the Shareholders entitled to cast a majority of the votes which all Shareholders present in person or by proxy are entitled to cast, shall act as the presiding officer of the meeting. The Secretary, or, in the absence of the Secretary, an Assistant Secretary, or in the absence of both the Secretary and Assistant Secretaries, a person appointed by the presiding officer of the meeting, shall act as Secretary. Except as otherwise provided by prior action of the Board of Directors, the presiding officer of the meeting shall determine the order of business and shall have the authority to establish rules for the conduct of the meeting.

Section 2.07. Voting. Every Shareholder entitled to vote at a meeting of Shareholders or to express consent or dissent to corporate action in writing without a meeting may authorize another person or persons to act for the Shareholder by proxy. Every proxy shall be executed or authenticated by the Shareholder or by the duly authorized attorney-in-fact of the Shareholder and filed with or transmitted to the Secretary of the corporation or its designated agent. A Shareholder or his or her duly authorized attorney-in-fact may execute or authenticate a writing or transmit an electronic message authorizing another person to act for such Shareholder by proxy. A telegram, telex, cablegram, datagram, email, Internet communication or other means of electronic transmission from a Shareholder or attorney-in-fact, or a photographic, facsimile or similar reproduction of a writing executed by a Shareholder or attorney-in-fact: (1) may be treated as properly executed or authenticated for purposes of this subsection; and (2) shall be so treated if it sets forth or utilizes a confidential and unique identification number or other mark furnished by the corporation to the Shareholder for the purposes of a particular meeting or transaction. A proxy, unless coupled with an interest, shall be revocable at will, notwithstanding any other agreement or any provision in the proxy to the contrary, but the revocation of a proxy shall not be effective until notice thereof has been given to the Secretary of the corporation or its designated agent in writing or by electronic transmission. No unrevoked proxy shall be valid after eleven months from the date of its execution, unless a longer time is expressly provided therein, but in no event shall any proxy, unless coupled with an interest, be voted on after three years from the date of its execution, authentication or transmission. A proxy shall not be revoked by the death or incapacity of the maker unless, before the vote is counted or the authority is exercised, written notice of such death or incapacity is given to the Secretary of the corporation or its designated agent. A Shareholder shall not sell a vote or execute a proxy to any person for any sum of money or anything of value. A proxy coupled with an interest shall include an unrevoked proxy in favor of a creditor of a Shareholder and such a proxy shall be valid as long as the debt owed by the Shareholder to the creditor remains unpaid.

Every Shareholder of record, except the holder of shares which have been called for redemption and with respect to which an irrevocable deposit of funds has been made, shall have the right, at every Shareholders' meeting, to such a vote for every share, and to such a fraction of a vote with respect to every fractional share, of stock of the corporation standing in such Shareholder's name on the books of the corporation as may be provided in the Articles, and to one vote for every share, and to a fraction of a vote equal to every fractional share, if no express provision for voting rights is made in the Articles. Treasury shares shall not be voted, directly or indirectly, at any meeting of Shareholders or be counted in connection with the expression of consent or dissent to corporate action in writing without a meeting.

Section 2.08. Voting Lists. The Officer or agent of the corporation having charge of the transfer books for shares of the corporation shall make a complete list of the Shareholders entitled to vote at any meeting of Shareholders, arranged in alphabetical order, with the address of and the number of shares held by each, which list shall be kept on file at the registered office of the corporation, and shall be subject to inspection by any Shareholder at any time during usual business hours. If the corporation has less than five thousand Shareholders, such list shall also be produced and kept open at the time and place of the meeting, and shall be subject to the inspection of any Shareholder during the whole time of the meeting. The original share ledger or transfer book, or a duplicate thereof, kept in Pennsylvania, shall be prima facie evidence as to

who are the Shareholders entitled to examine such list or share ledger or transfer book, or to vote, in person or by proxy, at any meeting of Shareholders.

Section 2.09. Judges of Election. The vote upon any matter, including the election of Directors, need not be by ballot. In advance of any meeting of Shareholders, the Board of Directors may appoint Judges of Election, who need not be Shareholders, to act at such meeting or any adjournment thereof. If Judges of Election are not so appointed, the presiding officer of any such meeting may, and upon the demand of any Shareholder or the Shareholder's proxy at the meeting and before voting begins shall, appoint Judges of Election. The number of Judges shall be either one or three, as determined, in the case of Judges appointed upon demand of a Shareholder, by Shareholders present entitled to cast a majority of the votes which all Shareholders present are entitled to cast thereon. No person who is a candidate for office shall act as a Judge. In case any person appointed as Judge fails to appear or fails or refuses to act, the vacancy may be filled by appointment made by the Board of Directors in advance of the convening of the meeting, or at the meeting by the presiding officer of the meeting.

If Judges of Election are appointed as aforesaid, they shall determine the number of shares outstanding and the voting power of each, the shares represented at the meeting, the existence of a quorum, the authenticity, validity and effect of proxies, receive votes or ballots, hear and determine all challenges and questions in any way arising in connection with the right to vote, count and tabulate all votes, determine the result, and do such acts as may be proper to conduct the election or vote with fairness to all Shareholders. If there be three Judges of Election, the decision, act or certificate of a majority shall be effective in all respects as the decision, act or certificate of all.

On request of the presiding officer of the meeting or of any Shareholder or the Shareholder's proxy, the Judges shall make a report in writing of any challenge or question or matter determined by them, and execute a certificate of any fact found by them.

Section 2.10. Determination of Shareholders of Record.

(a) The Board of Directors may fix a date, not more than ninety days preceding the date of any meeting of Shareholders, or the date fixed for the payment of any dividend or distribution, or the date for the allotment of rights, or the date when any change or conversion or exchange of shares will be made or go into effect, as a record date for the determination of the Shareholders entitled to notice of, or to vote at, any such meeting, or entitled to receive payment of any such dividend or distribution, or to receive any such allotment of rights, or to exercise the rights in respect of any such change, conversion or exchange of shares; and in such case, if otherwise entitled, all Shareholders of record on the date so fixed, and no others, shall be entitled to notice of, or to vote at, such meeting, or to receive payment of such dividend or distribution or to receive such allotment of rights, or exercise such rights, as the case may be, notwithstanding any transfer of any shares on the books of the corporation after any such record date fixed as aforesaid. When a determination of Shareholders of record has been made as provided in this section for purposes of a meeting, the determination shall apply to any adjournment thereof unless the Board of Directors fixes a new record date for the adjourned meeting.

(b) If a record date is not fixed:

(1) The record date for determining Shareholders entitled to notice of or to vote at a meeting of Shareholders shall be at the close of business on the day next preceding the day on which notice is given or, if notice is waived, at the close of business on the day immediately preceding the day on which the meeting is held.

(2) The record date for determining Shareholders entitled to express consent or dissent to corporate action without a meeting, when prior action by the Board of Directors is not necessary, to call a special meeting of the Shareholders, or to propose an amendment of the Articles, shall be the close of business on the day on which the first consent or dissent, request for a special meeting or petition proposing an amendment of the Articles is filed with the Secretary of the corporation.

(3) The record date for determining Shareholders for any other purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto.

Section 2.11. Consent of Shareholders in Lieu of Meeting.

(a) Unanimous Consent. Any action required or permitted to be taken at a meeting of the Shareholders or of a class of Shareholders may be taken without a meeting if, prior or subsequent to the action, a consent or consents thereto by all of the Shareholders who would be entitled to vote at a meeting for such purpose shall be filed with the Secretary of the corporation.

(b) Partial Consent. Any action required or permitted to be taken at a meeting of the Shareholders or of a class of Shareholders may be taken without a meeting upon the consent of Shareholders who would have been entitled to cast at least two-thirds of the total number of votes at a meeting at which all Shareholders entitled to vote thereon were present and voting. The consents shall be filed with the Secretary of the corporation. The action shall not become effective until after at least ten days' notice of the action has been given to each Shareholder entitled to vote thereon who has not consented thereto.

Section 2.12. Use of Conference Telephone or Other Technology. The presence or participation, including voting and taking other action, at a meeting of Shareholders, or the expression of consent or dissent to corporate action, by a Shareholder by conference telephone or other electronic means, including the Internet, shall constitute the presence of, or vote or action by, or consent or dissent of the Shareholder for purposes of the Business Corporation Law, the Articles and these By-Laws.

Section 2.13. Notice of Shareholder Business and Nominations at Annual Meetings.

(a) General. Nominations of persons for election to the Board of Directors of the corporation and the proposal of business to be considered by the Shareholders may be made at an annual meeting of Shareholders (i) pursuant to the corporation's notice of meeting given at the direction of the Board of Directors, (ii) otherwise by or at the direction of the Board of Directors, or (iii) by any Shareholder of the corporation who was a Shareholder of record at the

record date fixed for determining Shareholders entitled to vote at such meeting and also at the time of giving of notice provided for in this Section 2.13, who is entitled to vote at such meeting and who complies with the notice procedures set forth in this Section 2.13.

(b) Timely Notice. For nominations for election to the Board of Directors or other proposals to be properly brought before an annual meeting of Shareholders by a Shareholder pursuant to this Section 2.13, the Shareholder must have given timely notice thereof in writing to the Secretary of the corporation and such other business must otherwise be a proper matter for Shareholder action. To be timely, a Shareholder's notice shall be delivered to the Secretary at the principal executive offices of the corporation, not later than the close of business on the 60th calendar day, nor earlier than the close of business on the 90th calendar day, before the date one year after the date when the prior year's notice of annual meeting was released to Shareholders, except that for the annual meeting to be held in 2005, a Shareholder's notice must be delivered to the Secretary on or before the close of business on March 1, 2005. In lieu of delivery to the Secretary, the notice may be mailed to the Secretary by certified mail, return receipt requested, but shall be deemed to have been given only upon actual receipt by the Secretary. In no event shall the announcement of an adjournment of an annual meeting of Shareholders commence a new time period for the giving of a Shareholder's notice as described above. The requirements of this subsection shall not apply to a nomination for the election of Directors made to the Shareholders by the Board of Directors.

(c) Content of Notice. Such Shareholder's notice shall set forth, or be accompanied by (i) in the event the Shareholder proposes to nominate one or more persons for election or reelection as a Director (A) the name and residence address of the Shareholder, the beneficial owner, if any, on whose behalf the nomination is being made and the person or persons to be nominated; (B) the class and number of shares of the corporation which are owned beneficially and of record by such Shareholder and beneficial owner; (C) a representation that the Shareholder is a holder of record of voting stock of the corporation and intends to appear in person or by proxy at the meeting to nominate the person or persons specified in the notice; (D) such information regarding each nominee as would have been required to be included in a proxy statement filed pursuant to Regulation 14A promulgated by the Securities and Exchange Commission under the Securities Exchange Act of 1934, as amended (or pursuant to any successor act or regulation), had the corporation been subject to such Regulation and proxies been solicited with respect to such nominee by the management or Board of Directors of the corporation; (E) a description of all arrangements or understandings among any of the Shareholder, the beneficial owner, if any, and each nominee and any other person or persons (naming such person or persons) pursuant to which the nomination or nominations are to be made by the Shareholders; (F) the written consent of each nominee to serve as a Director of the corporation if so elected; and (G) all other information relating to the nomination that may be required to be disclosed under applicable law; and (ii) in the event the Shareholder proposes to bring any other business before the meeting, (A) the name and residence address of the Shareholder proposing to bring business before the meeting and the beneficial owner, if any, on whose behalf the proposal is made; (B) the class and number of shares of the corporation which are owned beneficially and of record by such Shareholder and such beneficial owner; (C) a representation that the Shareholder is a holder of record of the voting stock of the corporation and intends to appear in person or by proxy at the meeting to bring the business before the meeting; (D) a brief description of the business desired to be brought before the meeting, and the

reasons for bringing such business by such Shareholder and beneficial owner, if any, on whose behalf the proposal is made; (E) any personal or other material interest of the Shareholder and the beneficial owner, if any, in the business desired to be brought before the meeting; and (F) all other information relating to the proposed business that may be required to be disclosed under applicable law. In addition, a Shareholder seeking to bring a nomination or other business before the meeting shall promptly provide any other information reasonably requested by the corporation.

(d) Eligible Nominees, Etc. Only such persons who are nominated in accordance with the procedures set forth in this Section 2.13 shall be eligible to serve as Directors and only such business shall be conducted at an annual meeting of Shareholders as shall have been brought before the meeting in accordance with the procedures set forth in this Section 2.13. Except as otherwise provided by law, the Articles or these By-Laws, the presiding officer of the meeting shall have the power to determine whether a nomination or any business proposed to be brought before the meeting was made or proposed, as the case may be, in accordance with the procedures set forth in this Section 2.13 and, if any proposed nomination or business is not in compliance with this Section 2.13, to declare that such defective proposal or nomination shall be disregarded.

ARTICLE III.

BOARD OF DIRECTORS

Section 3.01. Powers; Personal Liability.

(a) General Rule. Unless otherwise provided by statute, all powers vested by law in the corporation shall be exercised by or under the authority of, and the business and affairs of the corporation shall be managed under the direction of, the Board of Directors.

(b) Fundamental Transactions. Where any provision of 15 Pa.C.S. Ch. 19 requires that an amendment of the Articles, a plan or the dissolution of the corporation be proposed or approved by action of the Board of Directors, that requirement shall be construed to authorize and be satisfied by the written agreement or consent of all of the Shareholders of the corporation entitled to vote thereon.

(c) Personal Liability of Directors.

(1) A Director shall not be personally liable, as such, for monetary damages (including, without limitation, any judgment, amount paid in settlement, penalty, punitive damages or expense of any nature (including, without limitation, attorneys' fees and disbursements)) for any action taken, or any failure to take any action, unless:

(A) the Director has breached or failed to perform the duties of his or her office under Subchapter 17B of the Business Corporation Law (or any successor provision); and

(B) the breach or failure to perform constitutes self-dealing, willful misconduct or recklessness.

(2) The provisions of paragraph (1) shall not apply to the responsibility or liability of a Director pursuant to any criminal statute, or the liability of a Director for the payment of taxes pursuant to local, state or federal law.

(d) Notation of Dissent. A Director who is present at a meeting of the Board of Directors, or of a committee of the Board, at which action on any corporate matter is taken on which the Director is generally competent to act, shall be presumed to have assented to the action taken unless his or her dissent is entered in the minutes of the meeting or unless the Director files a written dissent to the action with the Secretary of the meeting before the adjournment thereof or transmits the dissent in writing to the Secretary of the corporation immediately after the adjournment of the meeting. The right to dissent shall not apply to a Director who voted in favor of the action. Nothing in this section shall bar a Director from asserting that minutes of the meeting incorrectly omitted his or her dissent if, promptly upon receipt of a copy of such minutes, the Director notifies the Secretary, in writing, of the asserted omission or inaccuracy.

Section 3.02. Qualification and Election. All Directors of the corporation shall be natural persons of full age, but need not be residents of Pennsylvania or Shareholders of the corporation. Except in the case of vacancies, Directors shall be elected by the Shareholders. If the Board of Directors is classified with respect to the power to elect Directors or with respect to the terms of Directors and if, due to a vacancy or vacancies, or otherwise, Directors of more than one class are to be elected, each class of Directors to be elected at the meeting shall be nominated and elected separately. Any Shareholder or the Shareholder's proxy may nominate as many persons for the office of Director as there are positions to be filled in accordance with the procedures set forth in Section 2.13. If nominations for the office of Director have been called for as herein provided, only candidates who have been nominated in accordance therewith shall be eligible for election.

Unless the Articles provide for straight voting, in all elections for Directors every Shareholder entitled to vote shall have the right to multiply the number of votes to which such Shareholder may be entitled by the total number of Directors to be elected in the same election by the holders of the class of shares of which his or her shares are a part, and may cast the whole number of such votes for one candidate or may distribute them among any two or more candidates. The candidates receiving the highest number of votes from each class or group of classes entitled to elect Directors separately up to the number of Directors to be elected in the same election by such class or group of classes shall be elected.

Section 3.03. Number and Term of Office. The Board of Directors shall consist of such number of Directors, not less than six nor more than ten, as may be determined from time to time by resolution of the Board of Directors. Each Director shall serve until the next annual meeting of the Shareholders and until a successor shall have been elected and qualified, except in the event of death, resignation or removal. The number of Directors shall never be less than three, except that if all the shares of the corporation are owned beneficially and of record by either one or two Shareholders, the number of Directors may be less than three but not less than the number of Shareholders.

Section 3.04. Organization. At every meeting of the Board of Directors, the Chairman of the Board, if there be one, or, in the case of a vacancy in the office or absence of the Chairman

of the Board, one of the following Officers present in the order stated: the Vice Chairman of the Board, if there be one, the President, the Vice Presidents in their order of rank and seniority, or a Chairman chosen by a majority of the Directors present, shall preside, and the Secretary, or, in the absence of the Secretary, an Assistant Secretary, or in the absence of the Secretary and the Assistant Secretaries, any person appointed by the Chairman of the meeting, shall act as Secretary.

Section 3.05. Resignations. Any Director of the corporation may resign at any time by giving written notice to the Chairman of the Board or the Secretary of the corporation. Such resignation shall take effect at the date of the receipt of such notice or at any later time specified therein and, unless otherwise specified therein, the acceptance of such resignation shall not be necessary to make it effective.

Section 3.06. Vacancies. The Board of Directors may declare vacant the office of a Director if such Director be declared of unsound mind by an order of court, or convicted of any offense punishable by imprisonment for a term of more than one year, or for any other proper cause, or if within sixty days after notice of election, the Director does not accept such office either in writing or by attending a meeting of the Board of Directors.

Any vacancy or vacancies in the Board of Directors because of death, resignation, removal in any manner other than under the provisions of Section 3.07, disqualification, an increase in the number of Directors, or any other cause, may be filled by a vote of the majority of the remaining members of the Board of Directors though less than a quorum, at any regular or special meeting; and the Director or Directors so elected shall continue in office until the next annual election of Directors of the corporation and until their successors shall have been elected and qualified, or until their death, resignation or removal.

Section 3.07. Removal. At any special meeting called for the purpose of removing or electing Directors, the entire Board of Directors, or a class of the Board, where the Board is classified with respect to the power to elect Directors, or any individual Director may be removed from office without assigning any cause, by the vote of Shareholders entitled to cast at least a majority of the votes which all Shareholders would be entitled to cast at any annual election of Directors or of such class of Directors. In case the Board or such class of the Board or any one or more Directors be so removed, new Directors may be elected at the same meeting. If Shareholders are entitled to vote cumulatively for the Board or a class of the Board, no individual Director shall be removed, unless the entire Board or class of the Board be removed, in case the votes of a sufficient number of shares are cast against the resolution for a removal, which, if cumulatively voted at an annual election of Directors, would be sufficient to elect one or more Directors to the Board or to the class.

Section 3.08. Place of Meeting. The Board of Directors may hold its meetings at such place or places within Pennsylvania, or elsewhere as the Board of Directors may from time to time appoint, or as may be designated in the notice calling the meeting.

Section 3.09. Organization Meeting. Immediately after each annual election of Directors or other meeting at which the entire Board of Directors is elected, the newly elected Board of Directors shall meet for the purpose of organization, election of Officers, and the

transaction of other business, at the place where said election of Directors was held. Notice of such meeting need not be given. Such organization meeting may be held at any other time or place which shall be specified in a notice given as hereinafter provided for special meetings of the Board of Directors.

Section 3.10. Regular Meetings. Regular meetings of the Board of Directors shall be held at such time and place as shall be designated from time to time by resolution of the Board of Directors. If the date fixed for any such regular meeting be a legal holiday under the laws of the state where such meeting is to be held, then the same shall be held on the next succeeding business day, not a Saturday, or at such other time as may be determined by resolution of the Board of Directors. At such meetings, the Directors shall transact such business as may properly be brought before the meeting. Notice of regular meetings need not be given.

Section 3.11. Special Meetings. Special meetings of the Board of Directors shall be held whenever called by the Chairman of the Board or by two or more of the Directors. Notice of each such meeting shall be given to each Director by telephone or in writing at least twenty-four hours (in the case of notice by telephone, facsimile transmission, e-mail or other electronic transmission) or forty-eight hours (in the case of notice by telegram, courier service or express mail) or five days (in the case of notice by first class mail) before the time at which the meeting is to be held. Every such notice shall state the time and place of the meeting.

Notice of any special meeting of the Board of Directors during any emergency resulting from warlike damage or an attack on the United States or any nuclear or atomic disaster shall be given only to such of the Directors as it may be feasible to reach at the time and by such means as may be feasible at the time, including publication or radio.

Section 3.12. Quorum, Manner of Acting, and Adjournment. A majority of the Directors in office shall be present at each meeting in order to constitute a quorum for the transaction of business. Except as otherwise specified in the Articles or these By-Laws or provided by statute, the acts of a majority of the Directors present at a meeting at which a quorum is present shall be the acts of the Board of Directors. In the absence of a quorum, a majority of the Directors present may adjourn the meeting from time to time until a quorum be present, and no notice of any adjourned meeting need be given, other than by announcement at the meeting. The Directors shall act only as a Board and the individual Directors shall have no power as such; provided, however, that any action which may be taken at a meeting of the Board may be taken without a meeting if a consent or consents in writing setting forth the action so taken shall be signed by all of the Directors and shall be filed with the Secretary of the corporation.

To the extent required to constitute a quorum at any meeting of the Board of Directors during any emergency resulting from warlike damage or an attack on the United States or any nuclear or atomic disaster, the Officers of the corporation who are present shall be deemed in order of rank and within the same rank in order of seniority, Directors for such meeting.

Section 3.13. Executive and Other Committees. The Board of Directors, by resolution adopted by a majority of the whole Board, may designate an Executive Committee and one or more other committees, each committee to consist of two or more Directors. The Board may designate one or more Directors as alternate members of any committee, who may replace any

absent or disqualified member at any meeting of the committee or for the purposes of any written action by the committee. In the absence or disqualification of a member, and the alternate or alternates, if any, designated for such member, of any committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not the member or members present constitute a quorum, may unanimously appoint another Director to act at the meeting in the place of any such absent or disqualified member.

Except as otherwise provided in this section, the Executive Committee shall have and exercise all of the authority of the Board in the management of the business and affairs of the corporation and any other committee shall have and exercise the authority of the Board to the extent provided in the resolution designating the committee.

No such committee of the Board shall have the authority of the Board in reference to:

- (1) Amending the By-Laws of the corporation;
- (2) Declaring any dividend;
- (3) Issuing any authorized but unissued share;
- (4) Establishing and designating any class or series of shares and fixing and determining the relative rights and preferences thereof, changing the registered office of the corporation, or otherwise effecting any amendment of Articles of the corporation; or
- (5) Recommending to the Shareholders any plan for the sale, lease or exchange of all or substantially all of the property and assets of the corporation, any amendment of Articles, any plan of merger or consolidation, any voluntary dissolution of the corporation or any revocation of any election of the corporation to dissolve voluntarily.

A majority of the Directors in office designated to a committee, or Directors designated to replace them as provided in this section, shall be present at each meeting to constitute a quorum for the transaction of business and the acts of a majority of the Directors in office designated to a committee or their replacements shall be the acts of the committee.

Each committee shall keep regular minutes of its proceedings and report such proceedings periodically to the Board of Directors.

Sections 3.10, 3.11, 3.12 and 3.16 shall be applicable to committees of the Board of Directors.

Section 3.14. Interested Directors or Officers; Quorum. No contract or transaction between the corporation and one or more of its Directors or Officers, or between the corporation and any other corporation, partnership, association or other organization in which one or more of its Directors or Officers are Directors or Officers, or have a financial or other interest, shall be void or voidable solely for such reason, or solely because the Director or Officer is present at or participates in the meeting of the Board which authorizes the contract or transaction, or solely because his, her or their votes are counted for such purpose, if:

(1) The material facts as to such relationship or interest and as to the contract or transaction are disclosed or are known to the Board of Directors and the Board in good faith authorizes the contract or transaction by a vote sufficient for such purpose without counting the vote of the interested Director or Directors even though the disinterested Directors are less than a quorum; or

(2) The material facts as to such relationship or interest and as to the contract or transaction are disclosed or are known to the Shareholders entitled to vote thereon, and the contract or transaction is specifically approved in good faith by vote of the Shareholders; or

(3) The contract or transaction is fair as to the corporation as of the time it is authorized, approved or ratified by the Board of Directors or the Shareholders.

Common or interested Directors may be counted in determining the presence of a quorum at a meeting of the Board of Directors which authorizes a contract or transaction specified in this section.

Section 3.15. Fees. Each Director shall be paid such reasonable fee, if any, as shall be fixed by the Board of Directors for each meeting of the Board of Directors or committee of Directors which such Director shall attend as a member thereof and may be paid such other compensation for services as a Director as may be fixed by the Board of Directors.

Section 3.16. Use of Conference Telephone or Other Technology. Any Director may participate in any meeting of the Board of Directors by means of conference telephone or other electronic technology by means of which all persons participating in the meeting can hear each other. Participation in a meeting pursuant to this section shall constitute presence in person at the meeting.

ARTICLE IV.

NOTICE - WAIVERS

Section 4.01. Notice, What Constitutes. Any notice required to be given to any person under the provisions of the Articles, these By-Laws, or the Business Corporation Law, may be given to such person either personally or by sending a copy thereof:

(a) By first class or express mail, postage prepaid, or courier service, charges prepaid, to his or her postal address appearing on the books of the corporation or, in the case of Directors, supplied by the Director to the corporation for the purpose of notice. Notice pursuant to this clause (a) shall be deemed to have been given to the person entitled thereto when deposited in the United States mail or with a courier service for delivery to that person.

(b) By facsimile transmission, e-mail or other electronic communication to his or her facsimile number or address for e-mail or other electronic communications supplied by him or her to the corporation for the purpose of notice. Notice pursuant to this clause (b) shall be deemed to have been given to the person entitled thereto when sent.

A notice of a meeting shall specify the day, hour and geographic location, if any, of the meeting and any other information required by the Articles, these By-Laws or the Business Corporation Law.

Section 4.02. Waivers of Notice. Whenever any written notice is required to be given under the provisions of the Articles, these By-Laws, or the Business Corporation Law, a waiver thereof in writing, signed by the person or persons entitled to such notice, whether before or after the time stated therein, shall be deemed equivalent to the giving of such notice. Neither the business to be transacted at, nor the purpose of, a meeting need be specified in the waiver of notice of such meeting.

Attendance of a person, either in person or by proxy, at any meeting shall constitute a waiver of notice of such meeting, except where a person attends a meeting for the express purpose of objecting to the transaction of any business because the meeting was not lawfully called or convened.

ARTICLE V.

OFFICERS

Section 5.01. Number, Qualifications, Designation and Standard of Care.

(a) The Officers of the corporation shall be a President, one or more Vice Presidents, a Secretary, a Treasurer, and such other Officers as may be elected in accordance with the provisions of Section 5.03. One person may hold more than one office. Officers may but need not be Directors or Shareholders of the corporation. The President and Secretary shall be natural persons of full age; the Treasurer, however, may be a corporation, but if a natural person, shall be of full age. The Board of Directors may elect from among the members of the Board a Chairman of the Board and a Vice Chairman of the Board who shall be Officers of the corporation.

(b) In lieu of the standards of conduct otherwise provided by law, Officers of the corporation shall be subject to the same standards of conduct, including standards of care and loyalty and rights of justifiable reliance, as shall at the time be applicable to Directors of the corporation. An Officer of the corporation shall not be personally liable, as such, to the corporation or its Shareholders for monetary damages (including, without limitation, any judgment, amount paid in settlement, penalty, punitive damages or expense of any nature (including, without limitation, attorneys' fees and disbursements)) for any action taken, or any failure to take any action, unless the Officer has breached or failed to perform the duties of his or her office under the Articles, these By-Laws, or the applicable provisions of law and the breach or failure to perform constitutes self-dealing, willful misconduct or recklessness. The provisions of this subsection shall not apply to the responsibility or liability of an Officer pursuant to any criminal statute or for the payment of taxes pursuant to local, state or federal law.

Section 5.02. Election and Term of Office. The Officers of the corporation, except those elected by delegated authority pursuant to Section 5.03, shall be elected annually by the Board of Directors, and each such Officer shall hold office until the next annual organization meeting of

Directors and until a successor shall have been duly chosen and qualified, or until death, resignation or removal.

Section 5.03. Subordinate Officers, Committees and Agents. The Board of Directors may from time to time elect such other Officers and appoint such committees, employees or other agents as the business of the corporation may require, including one or more Assistant Secretaries, and one or more Assistant Treasurers, each of whom shall hold office for such period, have such authority, and perform such duties as are provided in these By-Laws, or as the Board of Directors may from time to time determine. The Board of Directors may delegate to any Officer or committee the power to elect subordinate Officers and to retain or appoint employees or other agents, or committees thereof, and to prescribe the authority and duties of such subordinate Officers, committees, employees or other agents.

Section 5.04. Resignations. Any Officer, committee, employee or other agent may resign at any time by giving written notice to the Board of Directors, or to the President or the Secretary of the corporation. Any such resignation shall take effect at the date of the receipt of such notice or at any later time specified therein and, unless otherwise specified therein, the acceptance of such resignation shall not be necessary to make it effective.

Section 5.05. Removal. Any Officer, committee, employee or other agent of the corporation may be removed, either for or without cause, by the Board of Directors or other authority which elected or appointed such Officer, committee, employee or other agent whenever in the judgment of such authority the best interests of the corporation will be served thereby.

Section 5.06. Vacancies. A vacancy in any Office because of death, resignation, removal, disqualification, or any other cause, shall be filled by the Board of Directors or by the Officer or committee to which the power to fill such office has been delegated pursuant to Section 5.03, as the case may be, and if the office is one for which these By-Laws prescribe a term, shall be filled for the unexpired portion of the term.

Section 5.07. General Powers. All Officers of the corporation as between themselves and the corporation, shall, respectively, have such authority and perform such duties in the management of the property and affairs of the corporation as may be determined by resolution of the Board of Directors, or in the absence of controlling provisions in a resolution of the Board of Directors, as may be provided in these By-Laws.

Section 5.08. The Chairman of the Board. The Chairman of the Board shall be the Chief Executive Officer of the corporation. The Chairman of the Board shall preside at all meetings of the corporation and shall be a member ex-officio of all standing committees. He shall also preside at all meetings of the Board of Directors. The Chairman of the Board shall perform such other duties and shall have such powers as the Board of Directors may delegate to him.

Section 5.09. The President. In case of the absence of the Chairman of the Board, the President shall preside at the meetings of the corporation and at the meetings of the Board of Directors, and in the event of the absence, resignation, sickness, or other disability or death of the Chairman of the Board, the President shall perform all the duties of the Chairman of the Board

until the return of the Chairman of the Board, or the disability shall have been removed, or a new Chairman of the Board shall be elected. The President shall have general supervision over the business and operations of the corporation, subject however, to the control of the Board of Directors and the Chairman of the Board. The President shall sign, execute, and acknowledge, in the name of the corporation, deeds, mortgages, bonds, contracts or other instruments, authorized by the Board of Directors, except in cases where the signing and execution thereof shall be expressly delegated by the Board of Directors, or by these By-Laws, to some other Officer or agent of the corporation; and, in general, shall perform all duties incident to the office of President and such other duties as from time to time may be assigned by the Board of Directors and the Chairman of the Board.

Section 5.10. The Vice Presidents. The Vice Presidents shall perform the duties of the President in the absence of the President and such other duties as may from time to time be assigned to them by the Board of Directors or by the President.

Section 5.11. The Secretary. The Secretary or an Assistant Secretary shall attend all meetings of the Shareholders and of the Board of Directors and shall record all the votes of the Shareholders and of the Directors and the minutes of the meetings of the Shareholders and of the Board of Directors and of committees of the Board in a book or books to be kept for that purpose; shall see that notices are given and records and reports properly kept and filed by the corporation as required by law; shall be the custodian of the seal of the corporation and see that it is affixed to all documents to be executed on behalf of the corporation under its seal; and, in general, shall perform all duties incident to the office of Secretary, and such other duties as may from time to time be assigned by the Board of Directors or the President.

Section 5.12. The Treasurer. The Treasurer or an Assistant Treasurer shall have or provide for the custody of the funds or other property of the corporation; shall collect and receive or provide for the collection and receipt of moneys earned by or in any manner due to or received by the corporation; shall deposit all funds in his or her custody as Treasurer in such banks or other places of deposit as the Board of Directors may from time to time designate; shall, whenever so required by the Board of Directors, render an account showing all transactions as Treasurer, and the financial condition of the corporation; and, in general, shall discharge such other duties as may from time to time be assigned by the Board of Directors or the President.

Section 5.13. Officers' Bonds. Any Officer shall give a bond for the faithful discharge of the duties of the Officer in such sum, if any, and with such surety or sureties, as the Board of Directors shall require.

Section 5.14. Salaries. The salaries of the Officers elected by the Board of Directors shall be fixed from time to time by the Board of Directors or by such Officer as may be designated by resolution of the Board. The salaries or other compensation of any other Officers, employees and other agents shall be fixed from time to time by the Officer or committee to which the power to elect such Officers or to retain or appoint such employees or other agents has been delegated pursuant to Section 5.03. No Officer shall be prevented from receiving such salary or other compensation by reason of the fact that the Officer is also a Director of the corporation.

ARTICLE VI.

CERTIFICATES OF STOCK, TRANSFER, ETC.

Section 6.01. Issuance. The share certificates of the corporation shall be numbered and registered in the share ledger and transfer books of the corporation as they are issued. They shall be signed by the President or a Vice President and by the Secretary or an Assistant Secretary or the Treasurer or an Assistant Treasurer, and shall bear the corporate seal, which may be a facsimile, engraved or printed; but where such certificate is signed by a transfer agent or a registrar, the signature of any corporate Officer upon such certificate may be a facsimile, engraved or printed. In case any Officer who has signed, or whose facsimile signature has been placed upon any share certificate shall have ceased to be such Officer because of death, resignation or otherwise, before the certificate is issued, it may be issued with the same effect as if the Officer had not ceased to be such at the date of its issue.

Section 6.02. Transfer. Transfers of shares shall be made on the books of the corporation upon surrender of the certificates therefor, endorsed by the person named in the certificate or by attorney lawfully constituted in writing. No transfer shall be made inconsistent with the provisions of the Uniform Commercial Code, 13 Pa.C.S. §§ 8101 et seq., and its amendments and supplements.

Section 6.03. Corporation Option To Purchase. Shares of the common stock of the corporation shall be and are subject to an option to the corporation to purchase and acquire the same as follows:

(a) In the event that a Holder (as defined below), shall desire to sell such shares or any part thereof to anyone other than the then trustee (in such capacity) of the Employee Stock Ownership Plan of the corporation, such Holder shall first notify the corporation in writing to that effect, which notice shall be addressed and sent to the corporation by registered mail, postage prepaid, to its principal office in Valley Forge, Pennsylvania, and shall identify the parties and state the terms of the proposed transaction, including the number of shares to be sold and the agreed upon purchase price per share. Within sixty days after the receipt of such notice by the corporation, the corporation shall have the right at its option to purchase and acquire the shares of stock to be sold at the per share price set forth in such notice. For purposes of this Section 6.03, the term "Holder" shall mean a holder of any shares of the common stock of the corporation other than a holder (including any subsequent holder) of shares of common stock of the corporation issued pursuant to warrants issued pursuant to that certain Warrant Agreement dated January 18, 2002 (the "Warrant Agreement") by and among the corporation and certain institutional investors listed on the signature pages thereto. Further, in no event shall any of the warrants issued pursuant to the Warrant Agreement be subject to the restrictions of this Section 6.03.

(b) In the event that the corporation desires to exercise the option given to it in paragraph (a) above, it shall, within said sixty day period, deliver to the Holder, or send to the Holder by registered mail, postage prepaid, at the address of the record owner of such shares appearing on the books of the corporation, an instrument in writing stating its intention to exercise the option hereinabove given.

(c) Upon receipt of the notice of intention from the corporation required by paragraph (b) above, the Holder shall deliver to the corporation (i) the written notice delivered by the corporation to the Holder pursuant to Section 6.07 with respect to the uncertificated shares held by him which pertain to such notice, and/or (ii) the certificate, or certificates, evidencing the shares held by him which pertain to such notice, in each case accompanied by a written instrument of transfer in the form approved by the corporation duly executed by the registered owner, or by his attorney duly authorized in writing, and covering the number of shares which are to be purchased by the corporation. The purchase price for the shares to be acquired by the corporation shall be paid by the corporation within ten days after receipt of such written notice and/or certificate, or certificates, and the appropriate instrument of transfer.

(d) All dividends on the common stock to be so purchased by the corporation which may be declared prior to the date upon which the corporation delivers or sends its notice as provided by paragraph (b) above, and such dividends only, shall become the property of the Holder.

(e) In the event that the option hereinabove given and granted to the corporation shall not be exercised, or the purchase price paid, within the times hereinabove specified, or in the even if the corporation through its Board of Directors shall express in writing to the Holder its decision not to exercise its option, then the Holder shall be entitled to sell the said shares of common stock held by such Holder with respect to which the option has not been exercised or payment not made. Such sale shall be made on the terms specified in the notice delivered by the Holder pursuant to paragraph (a) hereof on or before the expiration of the thirty day period commencing on the date that (1) the option granted to the corporation by paragraph (a) hereof expires without exercise, (ii) the period for payment by the corporation pursuant to paragraph (c) expires without such payment, or (iii) the corporation through its Board of Directors sends to the Holder by registered mail, addressed to the record owner of such shares as such address appears on the books of the corporation, advice that the corporation will not exercise its option; whichever of the foregoing three events shall be the first to occur. Any such shares so sold shall, in the hands of the person, firm or corporation acquiring the same, be subject in all respects to the restrictions, terms and conditions of this Section 6.03. If the Holder fails to consummate such sale within such thirty day period, the Holder shall comply with all the provisions of this Section 6.03 prior to any sale of the common stock of the corporation thereafter.

(f) No sale of the shares of common stock of the corporation, in violation of the provisions of this Section 6.03 of Article VI, shall be valid or effective.

(g) Any shares of common stock of the corporation purchased and acquired by the corporation in the exercise of any option hereinabove given to it, shall be held or disposed of by the corporation as the Board of Directors of the corporation may, in its discretion, determine.

(h) Nothing contained in this Section 6.03 shall release or relieve the Holder of any shares of the common stock of the corporation, outstanding prior to the adoption hereof, from any obligation upon such Holder created by any pre-existing By-Law unless and until a written notice with respect to uncertificated shares is delivered by the corporation to the Holder

pursuant to Section 6.07, or a new certificate, or certificates, in either case containing notice of the provisions of this Section 6.03, is issued in exchange for the certificate, or certificates, representing such previously outstanding shares.

(i) This Section 6.03 is substantively the same as Section 2 of Article VII of the corporation's By-Laws which were in effect prior to April 14, 1987. References to such Section 2 of Article VII on all Stock Certificates shall remain in full force and effect as to all Holders who hold certificates with a notice of the provisions thereof contained thereon, and such Section 2 of Article VII shall continue to obligate any Holder who holds certificates with such a notice contained thereon.

Section 6.04. Share Certificates. Certificates for shares of the corporation shall be in such form as provided by statute and approved by the Board of Directors. The share record books and the blank share certificate books shall be kept by the Secretary or by any agency designated by the Board of Directors for that purpose. Every certificate exchanged or returned to the corporation shall be marked "Cancelled," with the date of cancellation.

Section 6.05. Record Holder of Shares. The corporation shall be entitled to treat the person in whose name any share or shares of the corporation stand on the books of the corporation as the absolute owner thereof, and shall not be bound to recognize any equitable or other claim to, or interest in, such share or shares on the part of any other person.

Section 6.06. Lost, Destroyed or Mutilated Certificates. The holder of any shares of the corporation shall immediately notify the corporation of any loss, destruction or mutilation of the certificate therefor, and the Board of Directors may, in its discretion, cause a new certificate or certificates to be issued to such holder, in case of mutilation of the certificate, upon the surrender of the mutilated certificate, or, in case of loss or destruction of the certificate, upon satisfactory proof of such loss or destruction, and, if the Board of Directors shall so determine, the deposit of a bond in such form and in such sum, and with such surety or sureties, as it may direct.

Section 6.07. Uncertificated Shares. Notwithstanding anything herein to the contrary, any or all classes and series of shares, or any part thereof, may be represented by uncertificated shares, except that shares represented by a certificate that is issued and outstanding shall continue to be represented thereby until the certificate is surrendered to the corporation. Within a reasonable time after the issuance or transfer of uncertificated shares, the corporation shall send to the registered owner thereof, a written notice containing the information required to be set forth or stated on certificates. The rights and obligations of the holders of shares represented by certificates and the rights and obligations of the holders of uncertificated shares of the same class or series shall be identical. Notwithstanding anything herein to the contrary, the provisions of Sections 6.01, 6.02, 6.04 and 6.06 hereof shall be inapplicable to uncertificated shares and in lieu thereof the Board of Directors shall adopt alternative procedures for registration of transfers.

ARTICLE VII.

INDEMNIFICATION OF DIRECTORS, OFFICERS AND OTHER AUTHORIZED REPRESENTATIVES

Section 7.01. Scope of Indemnification.

(a) The corporation shall indemnify an indemnified representative against any liability incurred in connection with any proceeding in which the indemnified representative may be involved as a party or otherwise, by reason of the fact that such person is or was serving in an indemnified capacity, including, without limitation, liabilities resulting from any actual or alleged breach or neglect of duty, error, misstatement or misleading statement, negligence, gross negligence or act giving rise to strict or products liability, except (i) where such indemnification is expressly prohibited by applicable law, (ii) where the conduct of the indemnified representative has been determined pursuant to Section 7.06 or otherwise to constitute willful misconduct or recklessness within the meaning of 15 Pa.C.S. § 1746(b) or any superseding provision of law, or self-dealing as defined herein sufficient in the circumstances to bar indemnification against liabilities arising from the conduct or (iii) to the extent such indemnification is finally determined in an adjudication pursuant to Section 7.06 to be otherwise unlawful. “Self-dealing” shall mean the receipt of a personal benefit from the corporation to which the authorized representative is not legally entitled.

(b) If an indemnified representative is entitled to indemnification in respect of a portion, but not all, of any liabilities to which such person may be subject, the corporation shall indemnify such indemnified representative to the maximum extent for such portion of the liabilities.

(c) The termination of a proceeding by judgment, order, settlement, conviction or upon a plea of *nolo contendere* or its equivalent shall not, of itself, create a presumption that the indemnified representative is not entitled to indemnification.

(d) For purposes of this Article:

(1) “indemnified capacity” means any and all past, present and future service by an indemnified representative in one or more capacities as a Director, Officer, employee or agent of the corporation, or, at the request of the corporation, as a Director, Officer, employee, agent, fiduciary or trustee of another corporation, partnership, joint venture, trust, employee benefit plan or other entity or enterprise;

(2) “indemnified representative” means any and all Directors and Officers of the corporation and any other person designated as an indemnified representative by the Board of Directors of the corporation (which may, but need not, include any person serving at the request of the corporation, as a Director, Officer, employee, agent, fiduciary or trustee of another corporation, partnership, joint venture, trust, employee benefit plan or other entity or enterprise);

(3) “liability” means any damage, judgment, amount paid in settlement, fine, penalty, punitive damages, excise tax assessed with respect to an employee

benefit plan, or cost or expense of any nature (including, without limitation, attorneys' fees and disbursements); and

(4) "proceeding" means any threatened, pending or completed action, suit, appeal or other proceeding of any nature, whether civil, criminal, administrative or investigative, whether formal or informal, and whether brought by or in the right of the corporation, a class of its security holders or otherwise.

Section 7.02. Proceedings Initiated by Indemnified Representatives.

Notwithstanding any other provision of this Article, the corporation shall not indemnify under this Article an indemnified representative for any liability incurred in a proceeding initiated (which shall not be deemed to include counter-claims or affirmative defenses) or participated in as an intervenor or amicus curiae by the person seeking indemnification unless such initiation of or participation in the proceeding is authorized, either before or after its commencement, by the affirmative vote of a majority of the Directors in office. This section does not apply to reimbursement of expenses incurred in successfully prosecuting or defending an arbitration under Section 7.06 or otherwise successfully prosecuting or defending the rights of an indemnified representative granted by or pursuant to this Article.

Section 7.03. Advancing Expenses. The corporation shall pay the expenses (including attorneys' fees and disbursements) incurred in good faith by an indemnified representative in advance of the final disposition of a proceeding described in Section 7.01 or 7.02 upon receipt of an undertaking by or on behalf of the indemnified representative to repay such amount if it shall ultimately be determined pursuant to Section 7.06 that such person is not entitled to be indemnified by the corporation pursuant to this Article. Neither action by the Board of Directors nor confirmation of the financial ability of an indemnified representative to repay an advance shall be a prerequisite to the making of such advance.

Section 7.04. Securing of Indemnification Obligations. To further effect, satisfy or secure the indemnification obligations provided herein or otherwise, the corporation may maintain insurance, obtain a letter of credit, act as self-insurer, create a reserve, trust, escrow, cash collateral or other fund or account, enter into indemnification agreements, pledge or grant a security interest in any assets or properties of the corporation, or use any other mechanism or arrangement whatsoever in such amounts, at such costs, and upon such other terms and conditions as the Board of Directors shall deem appropriate. Absent fraud, the determination of the Board of Directors with respect to such amounts, costs, terms and conditions shall be conclusive against all security holders, Officers and Directors and shall not be subject to voidability.

Section 7.05. Payment of Indemnification. An indemnified representative shall be entitled to indemnification within thirty days after a written request for indemnification has been delivered to the Secretary of the corporation.

Section 7.06. Arbitration. Any dispute related to the right to indemnification, contribution or advancement of expenses as provided under this Article, except with respect to indemnification for liabilities arising under the Securities Act of 1933 which the corporation has

undertaken to submit to a court for adjudication, shall be decided only by arbitration in the metropolitan area in which the principal executive offices of the corporation are located, in accordance with the commercial arbitration rules then in effect of the American Arbitration Association, before a panel of three arbitrators, one of whom shall be selected by the corporation, the second of whom shall be selected by the indemnified representative and the third of whom shall be selected by the other two arbitrators. In the absence of the American Arbitration Association, or if for any reason arbitration under the arbitration rules of the American Arbitration Association cannot be initiated, or if one of the parties fails or refuses to select an arbitrator, or if the arbitrators selected by the corporation and the indemnified representative cannot agree on the selection of the third arbitrator within thirty days after such time as the corporation and the indemnified representative have each been notified of the selection of the other's arbitrator, the necessary arbitrator or arbitrators shall be selected by the presiding judge of the court of general jurisdiction in the county where the principal executive offices of the corporation are located. Each arbitrator selected as provided herein is required to be or have been a Director or Executive Officer of a corporation whose shares of common stock were listed during at least one year of such service on the New York Stock Exchange or the American Stock Exchange or quoted on the National Association of Securities Dealers Automated Quotations System. The party or parties challenging the right of an indemnified representative to the benefits of this Article shall have the burden of proof. The corporation shall reimburse an indemnified representative for the expenses (including attorneys' fees and disbursements) incurred in successfully prosecuting or defending such arbitration. Any award entered by the arbitrators shall be final, binding and nonappealable and judgment may be entered thereon by any party in accordance with applicable law in any court of competent jurisdiction. This arbitration provision shall be specifically enforceable.

Section 7.07. Contribution. If the indemnification provided for in this Article or otherwise is unavailable for any reason in respect of any liability or portion thereof, the corporation shall contribute to the liabilities to which the indemnified representative may be subject in such proportion as is appropriate to reflect the intent of this Article or otherwise.

Section 7.08. Mandatory Indemnification of Directors, Officers, etc. To the extent that an authorized representative of the corporation has been successful on the merits or otherwise in defense of any action, suit or proceeding referred to in Sections 1741 or 1742 of the Business Corporation Law or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees and disbursements) actually and reasonably incurred by such person in connection therewith.

Section 7.09. Discharge of Duty. An indemnified representative shall be deemed to have discharged such person's duty to the corporation if he or she has relied in good faith on information, opinions, reports or statements, including financial statements and other financial data, in each case prepared or presented by any of the following:

- (1) one or more Officers or employees of the corporation whom the indemnified representative reasonably believes to be reliable and competent with respect to the matter presented;

(2) legal counsel, public accountants or other persons as to matters that the indemnified representative reasonably believes are within the person's professional or expert competence; or

(3) a committee of the Board of Directors on which he or she does not serve as to matters within its area of designated authority, which committee he or she reasonably believes to merit confidence.

Section 7.10. Contract Rights; Amendment or Repeal. All rights under this Article shall be deemed a contract between the corporation and the indemnified representative pursuant to which the corporation and each indemnified representative intend to be legally bound. Any repeal, amendment or modification hereof shall be prospective only and shall not affect any rights or obligations then existing.

Section 7.11. Scope of Article. The rights granted by this Article shall not be deemed exclusive of any other rights to which those seeking indemnification, contribution or advancement of expenses may be entitled under any statute, agreement, vote of Shareholders or disinterested Directors or otherwise, both as to action in an indemnified capacity and as to action in any other capacity. The indemnification, contribution and advancement of expenses provided by or granted pursuant to this Article shall continue as to a person who has ceased to be an indemnified representative in respect of matters arising prior to such time, and shall inure to the benefit of the heirs, executors, administrators and personal representatives of such a person.

Section 7.12. Reliance on Provisions; Interpretation. Each person who shall act as an indemnified representative of the corporation shall be deemed to be doing so in reliance upon the rights provided by this Article. The provisions of this Article are intended to constitute bylaws authorized by 15 Pa.C.S. § 1746.

ARTICLE VIII.

MISCELLANEOUS

Section 8.01. Corporate Seal. The corporation shall have a corporate seal in the form of a circle containing the name of the corporation, the year of incorporation and such other details as may be approved by the Board of Directors. The affixation of the corporate seal shall not be necessary to the valid execution, assignment or endorsement by the corporation of any instrument or other document.

Section 8.02. Checks. All checks, notes, bills of exchange or other orders in writing shall be signed by such person or persons as the Board of Directors may from time to time designate.

Section 8.03. Contracts. Except as otherwise provided in these By-Laws, the Board of Directors may authorize any Officer or Officers, agent or agents, to enter into any contract or to execute or deliver any instrument on behalf of the corporation, and such authority may be general or confined to specific instances. Any note, mortgage, evidence of indebtedness, contract or other document, or any assignment or endorsement thereof, executed or entered into between the corporation and any other person, when signed by one or more Officers or agents

having actual or apparent authority to sign it, or by the President or Vice President and Secretary or Assistant Secretary or Treasurer or Assistant Treasurer of the corporation, shall be held to have been properly executed for and on behalf of the corporation, without prejudice to the rights of the corporation against any person who shall have executed the instrument in excess of his or her actual authority.

Section 8.04. Deposits. All funds of the corporation shall be deposited from time to time to the credit of the corporation in such banks, trust companies or other depositories as the Board of Directors may approve or designate, and all such funds shall be withdrawn only upon checks signed by such one or more Officers or employees as the Board of Directors shall from time to time determine.

Section 8.05. Financial Reports. Unless otherwise agreed between the corporation and a Shareholder, the corporation shall furnish to its Shareholders annual financial statements, including at least a balance sheet as of the end of each fiscal year and a statement of income and expenses for the fiscal year. The financial statements shall be prepared on the basis of generally accepted accounting principles, if the corporation prepares financial statements for the fiscal year on that basis for any purpose, and may be consolidated statements of the corporation and one or more of its subsidiaries. The financial statements shall be mailed by the corporation to each of its Shareholders entitled thereto within 120 days after the close of each fiscal year and, after the mailing and upon written request, shall be mailed by the corporation to any Shareholder or beneficial owner entitled thereto to whom a copy of the most recent annual financial statements has not previously been mailed. In lieu of mailing the statements, the corporation may send them by facsimile, e-mail or other electronic transmission to any Shareholder who has supplied the corporation with a facsimile number or address for electronic transmissions for the purpose of receiving financial statements of the corporation. Statements that are audited or reviewed by a certified public accountant or a public accountant shall be accompanied by the report of the accountant; in other cases, each copy shall be accompanied by a statement of the person in charge of the financial records of the corporation:

(a) Stating the person's reasonable belief as to whether or not the financial statements were prepared in accordance with generally accepted accounting principles and, if not, describing the basis of presentation.

(b) Describing any material respects in which the financial statements were not prepared on a basis consistent with those prepared for the previous year.

Section 8.06. Corporate Records. There shall be kept at the registered office or principal place of business of the corporation an original or duplicate record of the proceedings of the Shareholders and of the Directors, and the original or a copy of the By-Laws including all amendments or alterations thereto to date, certified by the Secretary of the corporation. An original or duplicate share register shall also be kept at the registered office or principal place of business of the corporation, at the office of a transfer agent or registrar, or at any actual business office of the corporation, giving the names of the Shareholders, their respective addresses and the number and class of shares held by each. The corporation shall also keep appropriate, complete and accurate books or records of account, which may be kept at its registered office or at its principal place of business.

Every Shareholder shall, upon written demand under oath stating the purpose thereof, have a right to examine, in person or by agent or attorney, during the usual hours for business, for any proper purpose, the share register, books or records of account, and records of the proceedings of the Shareholders and Directors, and make copies or extracts therefrom. A proper purpose shall mean a purpose reasonably related to such person's interest as a Shareholder. In every instance where an attorney or other agent shall be the person who seeks the right to inspection, the demand under oath shall be accompanied by a power of attorney or such other writing which authorizes the attorney or other agent to so act on behalf of the Shareholder. The demand under oath shall be directed to the corporation at its registered office in Pennsylvania, at its principal place of business, or in care of the person in charge of an actual business office of the corporation. Where the Shareholder seeks to inspect the books and records of the corporation, other than its share register or list of Shareholders, the Shareholder shall first establish (1) compliance with the provisions of this section respecting the form and manner of making demand for inspection of such documents; and (2) that the inspection sought is for a proper purpose.

Section 8.07. Amendment of By-Laws. These By-Laws may be amended or repealed, or new By-Laws may be adopted, either (1) by vote of the Shareholders entitled to cast at least a majority of the votes which all Shareholders are entitled to cast thereon at any duly organized annual or special meeting of Shareholders, or (2), with respect to those matters which are not by statute reserved exclusively to the Shareholders, by vote of a majority of the Board of Directors of the corporation in office at any regular or special meeting of Directors. Such proposed amendment, repeal or new By-Laws, or a summary thereof, shall be set forth in any notice of such meeting, whether annual, regular or special.

We, the undersigned President and, Secretary of Houghton International Inc., a corporation organized under the laws of the Commonwealth of Pennsylvania, do hereby certify that the foregoing is a true copy of the By-Laws of said corporation adopted at the Board of Directors meeting held January 21, 2005.

We do further certify that the seal affixed to this page is the duly authorized seal of the corporation.

President

Secretary

APPENDIX B

Houghton International Inc. Annual Reports (2000 – 2004)

Houghton International Inc. and Subsidiaries

**Consolidated Financial Statements for the
Years Ended December 31, 2000 and 1999**

FINANCIAL HIGHLIGHTS

	2000	1999
<hr/>		
For the year	(in thousands of dollars except per-share data)	
Sales	\$313,367	\$277,451
Net income (loss)	(993)	1,211
<hr/>		
Per common share		
Earnings	\$ (0.23)	\$ 0.31
Dividends	-	0.33
<hr/>		
At year end		
Total assets	\$230,390	\$208,774
Shareholders' equity	62,233	56,478
<hr/>		

Houghton International Inc. is an independent supplier of specialty processing products and service for the metalworking industry. Founded in 1865, the Company completed its 135th year in 2000.

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CONSOLIDATED BALANCE SHEETS

December 31, 2000 and 1999

(Dollars in thousands except share and per share amounts)

ASSETS	2000	1999
CURRENT ASSETS:		
Cash and cash equivalents	\$ 7,070	\$ 6,153
Trade receivables (less allowance for doubtful accounts and discounts - 2000, \$3,692 ; 1999, \$1,549)	69,814	61,673
Inventories	36,373	32,726
Other current assets	3,230	5,777
Deferred income taxes	2,945	2,142
Total current assets	119,432	108,471
INVESTMENTS AND ADVANCES:		
Equity affiliates	6,354	7,070
Other	702	1,561
Total investments and advances	7,056	8,631
PROPERTY, PLANT AND EQUIPMENT:		
Land and buildings	54,266	52,870
Machinery and equipment	82,298	81,168
Leasehold improvements	403	398
Construction in progress	6,230	2,185
Total	143,197	136,621
Less accumulated depreciation and amortization	80,505	77,151
Total property, plant and equipment, net	62,692	59,470
OTHER ASSETS	41,210	32,202
TOTAL	<u>\$230,390</u>	<u>\$208,774</u>

See notes to consolidated financial statements.

LIABILITIES AND STOCKHOLDERS' EQUITY	2000	1999
CURRENT LIABILITIES:		
Short-term debt	\$ 7,365	\$ 12,256
Current portion of long-term debt	12,167	8,023
Accounts payable	42,216	27,626
Accrued compensation and other	14,817	16,246
Income taxes payable	76	1,188
Deferred income taxes	1,160	40
Total current liabilities	77,801	65,379
LONG-TERM DEBT	82,909	74,621
OTHER LIABILITIES:		
Deferred compensation	6,006	7,358
Deferred income taxes	581	3,751
Minority interests and other	860	1,187
Total other liabilities	7,447	12,296
COMMITMENTS AND CONTINGENCIES (See Note 14)		
STOCKHOLDERS' EQUITY:		
Capital stock - par value, \$.50 a share:		
Noncumulative 6% voting preferred, call price \$.53 a share - authorized 500,000 shares	0	0
Common stock - par value, \$.50 a share: authorized 25,000,000; issued 10,613,600 shares	5,307	5,307
Additional paid-in capital	18,339	8,292
Retained earnings	121,660	122,653
Accumulated other comprehensive income (loss)	(15,640)	(11,140)
Total	129,666	125,112
Treasury stock, at cost (2000, 6,255,938 shares; 1999, 6,726,077 shares)	(67,359)	(68,411)
Notes receivable - stock purchase plan	(74)	(223)
Total	(67,433)	(68,634)
Total stockholders' equity	62,233	56,478
TOTAL	\$230,390	\$208,774

CONSOLIDATED STATEMENTS OF INCOME AND COMPREHENSIVE INCOME AND RETAINED EARNINGS For the years ended December 31, 2000 and 1999

(Dollars in thousands, except per share amounts)

	<u>2000</u>	<u>1999</u>
NET SALES	\$313,367	\$277,451
COST OF GOODS SOLD	<u>205,572</u>	<u>177,492</u>
GROSS PROFIT ON SALES	107,795	99,959
OPERATING EXPENSES	93,404	94,484
NON-RECURRING EXPENSES (Note 17)	<u>5,157</u>	<u>-</u>
OPERATING INCOME	<u>9,234</u>	<u>5,475</u>
OTHER INCOME (EXPENSE):		
Equity in net income of affiliates	61	893
Exchange loss	(177)	(926)
Gain on sale of property, plant and equipment	201	1,548
Interest - net	(7,925)	(5,145)
Other miscellaneous income (expense) - net	<u>(381)</u>	<u>180</u>
Total	<u>(8,221)</u>	<u>(3,450)</u>
INCOME BEFORE INCOME TAXES	1,013	2,025
PROVISION FOR INCOME TAXES	<u>2,006</u>	<u>814</u>
NET INCOME (LOSS)	(993)	1,211
OTHER COMPREHENSIVE INCOME (LOSS), Net of Tax:		
Foreign currency translation adjustments	<u>(4,500)</u>	<u>(3,247)</u>
COMPREHENSIVE INCOME (LOSS)	<u>\$ (5,493)</u>	<u>\$ (2,036)</u>
RETAINED EARNINGS AT BEGINNING OF YEAR	\$122,653	\$122,715
NET INCOME (LOSS)	<u>(993)</u>	<u>1,211</u>
Total	<u>121,660</u>	<u>123,926</u>
CASH DIVIDENDS:		
Common - 1999, \$.33 per share	<u>-</u>	<u>(1,273)</u>
RETAINED EARNINGS AT END OF YEAR	<u>\$121,660</u>	<u>\$122,653</u>
BASIC EARNINGS (LOSS) PER SHARE OF COMMON STOCK	<u>\$(0.23)</u>	<u>\$0.31</u>
DILUTED EARNINGS (LOSS) PER SHARE OF COMMON STOCK	<u>\$(0.23)</u>	<u>\$0.30</u>

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS

For the years ended December 31, 2000 and 1999

(Dollars in thousands)

	2000	1999
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net Income	\$ (993)	\$ 1,211
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	9,134	9,018
Gain on disposal of property, plant and equipment	(201)	(2,526)
Minority interest in (loss) earnings of subsidiaries	86	(4)
Deferred compensation	(866)	685
Deferred income taxes	(165)	(1,444)
Other	(175)	(825)
Changes in current assets and liabilities, net of effects of acquisitions:		
Accounts receivable and other assets	(4,002)	(6,534)
Inventories	(3,951)	(418)
Accounts payable and accrued expenses	7,482	323
Accrued income taxes payable	(678)	(2,909)
Net cash provided by (used in) operating activities	<u>5,671</u>	<u>(3,423)</u>
CASH FLOWS FROM INVESTING ACTIVITIES:		
Capital expenditures	(8,306)	(11,816)
Proceeds from disposals of property, plant and equipment	1,176	4,108
Payments for acquisitions (net of cash acquired)	(2,524)	(1,863)
Other	69	84
Net cash used in investing activities	<u>(9,585)</u>	<u>(9,487)</u>
CASH FLOWS FROM FINANCING ACTIVITIES:		
Net proceeds of short-term debt - banks	(388)	5,528
Net purchases of treasury stock	92	(1,367)
Net proceeds from issuance of long-term debt	5,341	7,482
Dividends paid	-	(1,273)
Net cash provided by financing activities	<u>5,045</u>	<u>10,370</u>
EFFECT OF EXCHANGE RATE CHANGES ON CASH	<u>(214)</u>	<u>(108)</u>
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	917	(2,648)
CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR	<u>6,153</u>	<u>8,801</u>
CASH AND CASH EQUIVALENTS AT END OF YEAR	<u>\$ 7,070</u>	<u>\$ 6,153</u>

SUPPLEMENTAL DISCLOSURE OF CERTAIN NON-CASH INVESTING AND FINANCING ACTIVITIES AND OTHER CASH FLOW INFORMATION

Cash paid for income taxes was \$2,893 and \$5,164, and for interest was \$8,133 and \$5,683 in 2000 and 1999, respectively.

458,650 common shares with redemption options valued at \$11,008 were issued in connection with the acquisition of Bencyn, Inc. (Note 2).

Accounts payable at December 31, 2000 includes \$2,048 of capital expenditures.

See notes to consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

For the years ended December 31, 2000 and 1999

(Dollars in thousands, except share amounts)

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

- A. Business – Houghton International Inc. is an independent supplier of specialty processing products and service for the metalworking industry. The principal markets for Houghton International Inc.'s products and services are the Americas, Europe and Asia.
- B. Principles of Consolidation and Basis of Presentation – The consolidated financial statements include Houghton International Inc. and all majority owned and controlled subsidiaries (the "Company") and, on an equity basis, 20%-50% owned affiliates. All significant intercompany transactions and balances have been eliminated.
- Total assets, liabilities and net income of equity affiliates amounted to \$38,620, \$26,018, and \$122, respectively in 2000 and \$40,649, \$26,509, and \$1,734, respectively in 1999.
- Total assets, liabilities, and net income of consolidated foreign subsidiaries amounted to \$147,834, \$98,067, and \$663, respectively in 2000 and \$149,812, \$100,529, and \$(111) respectively in 1999.
- C. Revenue Recognition - Sales are generally recognized when products are shipped at which time title and risk of loss passes to the customer.
- D. Shipping and Handling - The Company reports shipping and handling revenues as net sales and the related cost as cost of goods sold.
- E. Inventories – Domestic inventories are priced using the last-in, first-out (LIFO) cost method. Such LIFO amounts represent 24% and 18% of the total 2000 and 1999 inventories prior to the LIFO adjustment, respectively. Other inventories are carried at the lower of cost or market, cost being determined by the first-in, first-out (FIFO) method.

	December 31	
	2000	1999
Raw materials	\$15,021	\$13,146
Work in process	956	1,340
Finished goods	20,396	18,240
Total	\$36,373	\$32,726

If the FIFO method of inventory valuation had been used for all inventories by the Company, inventories would have been \$8,185 and \$8,063 higher at December 31, 2000 and 1999, respectively.

- F. Depreciation and Amortization – Depreciation and amortization are provided generally on a straight-line basis over the estimated useful lives of the related assets.
- G. Excess of Cost Over Net Assets of Acquired Companies – Included in other assets is the unamortized excess of cost over net assets of acquired companies (goodwill). Such costs are being amortized on a straight-line basis over periods of 5 to 25 years (Note 12). Amortization expense was \$1,976 and \$1,349 in 2000 and 1999, respectively.
- H. Earnings Per Share of Common Stock – For the years ended December 31, 2000 and 1999, basic and diluted EPS are computed using the weighted average number of shares of common stock outstanding. Common equivalent shares from options are included in the diluted computation when their effect is dilutive.

The following table shows the reconciliation between the numerators and denominators for the basic and diluted EPS calculations, where income is the numerator and the weighted average number of shares is the denominator.

	Year Ended December 31					
	2000			1999		
	Income	Shares	Per Share	Income	Shares	Per Share
Basic EPS						
Income (loss) available to common shareholders	\$(993)	4,320,990	<u>\$(0.23)</u>	\$1,211	3,863,603	<u>\$0.31</u>
Effect of Dilutive Securities Options	—	—		—	95,245	
Diluted EPS	<u>\$(993)</u>	<u>4,320,990</u>	<u>\$(0.23)</u>	<u>\$1,211</u>	<u>3,958,848</u>	<u>\$0.30</u>

- I. Cash and Cash Equivalents – Cash and cash equivalents represent cash in banks and short-term investments having an original maturity of less than three months.
- J. Foreign Currency Translation – The accounts of most foreign subsidiaries and affiliates are measured using local currency as the functional currency. For those operations, assets and liabilities are translated into US dollars at period end exchange rates, and income and expense accounts are translated at average monthly exchange rates. Net gains or losses resulting from such translation are accumulated in other comprehensive income (loss) within stockholders' equity. Gains and losses from foreign currency transactions are included in other income.
- K. Income Taxes – The Company accounts for income taxes under the asset and liability method in accordance with Statement of Financial Accounting Standards (SFAS) No. 109, Accounting for Income Taxes (see Note 11).
- L. Environmental Expenditures – Environmental expenditures that relate to current or future revenues are expensed or capitalized as appropriate. Expenditures that relate to an existing condition caused by past operations, and do not contribute to current or future revenue generation, are expensed. Liabilities are recorded when environmental assessments and/or clean-ups are probable, and the costs can be reasonably estimated. Generally, the timing of these accruals coincides with the commitment to a formal plan of action.
- M. Impairment of Long-Lived Assets – In the event that facts and circumstances indicate that the cost of property, plant and equipment, goodwill or other assets may be impaired, an evaluation of recoverability would be performed. If an evaluation is required, the estimated future undiscounted cash flows associated with the asset would be compared to the assets' carrying amount to determine if a write-down to market value or discounted cash flow value is required.
- N. Estimates – The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results may differ from those estimates and assumptions.
- O. Reclassifications – Certain reclassifications have been made to conform prior years' balances to current year presentations.

2. BUSINESS ACQUISITIONS

The Company accounted for its acquisitions in 2000 and 1999 as purchases; accordingly assets and liabilities acquired are recorded at their fair value and the excess of purchase price over the fair value of net assets acquired is allocated to goodwill. Results of operations for entities acquired are included in the financial statements from the date of acquisition.

In February 1999, the Company acquired the assets of Worldwide Lubricants of Wheeling, IL for approximately \$1,795 payable \$600 at closing and \$1,195 payable in five equal, annual, installments. The payments are unsecured obligations of the Company and bear no interest; accordingly, the Company discounted these obligations based on their current borrowing rates. The excess of purchase price over the fair value of assets and liabilities acquired was \$1,211 and is being amortized over 25 years.

In January 2000, the Company acquired Bencyn, Inc. and an associated real estate holding company located in Lafayette, IN for approximately \$13,809, including acquisition costs. Bencyn is a specialty processing products and services company. The purchase consideration consisted of \$2,400 in cash, 458,650 shares of Houghton common stock and the value of options which allow the sellers to sell Houghton stock, aggregating approximately \$8,900 at minimum prices, to the Company. The sellers have an option beginning in April 2001 and ending April 2004 in the amount of \$4,300, at minimum prices increasing each year from \$24 per share to \$30 per share. The sellers have a second option to sell up to 50% of their remaining Houghton stock to the Company at \$32 beginning in 2005. The estimated minimum cost of the shares under this second option is \$4,600. In the event that the exercise of options for cash would cause the Company to violate any of its debt covenants, the options, as amended, permit the Company to issue convertible subordinated notes in lieu of cash. The excess of the purchase price over the fair value of assets and liabilities acquired (including \$4,463 of Bencyn debt) was \$14,137 and is being amortized over periods ranging from 7 to 25 years.

3. BUSINESS DISPOSALS

During 2000, the Company closed its South Wales plant and recognized an impairment loss of \$193 which is included in gain (loss) on sale of property, plant and equipment.

During 1999, the Company sold its Santa Ana, CA plant and a pretax gain of \$1,400 is included in gain (loss) on sale of property, plant and equipment.

Additionally in 1999, the Company sold its Birmingham, England office and laboratory facilities and consolidated all operations in Manchester, England and a pretax gain of \$600 was offset against office relocation costs included in operating expenses.

During 1998, the Company sold its worldwide paper chemicals business to Hercules Incorporated. As part of the agreement of sale, the Company entered into a know-how sharing agreement and a transition product and services agreement, and agreed not to compete against Hercules. These agreements require the Company to provide certain training and support and not to directly compete in the paper chemicals business against Hercules for a period not to exceed five years. In accordance with the terms of the agreements, the Company receives five \$2,000 installments beginning October 1998 through October 2002. The continuing payments are considered income when received.

4. SHORT-TERM DEBT

Short-term debt consists of borrowings under bank lines of credit bearing interest at various rates and foreign bank overdrafts. As of December 31, 2000 and 1999, such borrowings totaled \$7,365 and \$12,256, respectively; and unused lines of credit totaled \$9,137 and \$11,155, respectively. One of the credit lines is collateralized by machinery and equipment with a net book value of approximately \$723 and \$700 as of December 31, 2000 and 1999, respectively; the remaining lines of credit are unsecured.

5. LONG-TERM DEBT

Long-term debt is comprised of the following:

	December 31	
	2000	1999
Revolving credit agreements	\$70,763	\$70,604
Term loans	13,095	10,219
Industrial Revenue Bond	1,500	-
Obligations under Capital Leases	1,254	322
Other notes payable	8,464	1,499
Total	95,076	82,644
Less current portion	12,167	8,023
Long-term debt	<u>\$82,909</u>	<u>\$74,621</u>

A. Revolving Credit Agreements – On February 17, 2000, the Company entered into an Amended and Restated Revolving Credit Agreement under which the Company could borrow up to \$75,000 in revolving credit (the “Senior Revolver.”) of this amount, up to \$50,000 may be borrowed in Eurocurrencies. On December 29, 2000, the lenders under the Senior Revolver consented to the transfer of \$12,238 of borrowings to their correspondent bank in Germany and issued a payment guarantee relating thereto under an agreement that expires January 31, 2002. The agreements provide for Eurocurrency borrowings which bear interest based upon prevailing LIBOR interest rates (plus applicable margin), while borrowings in US dollars bear interest based upon prevailing prime or LIBOR rates (plus applicable margin). Average interest rates as of December 31, 2000 were 7.75%. The Senior Revolver was scheduled to expire March 31, 2002.

Principal under the Senior Revolver was partially repaid subsequent to December 31, 2000 from proceeds of sale of the Durferit subsidiary (Note 18) and from issuance of Senior Subordinated Notes (Note 5f). Pursuant to a Waiver and Amendment to the Senior Revolver dated January 18, 2002, the maturity was extended to January 1, 2004 and the commitment was reduced to \$60 million with further reductions scheduled on December 1, 2002 to \$53 million and on June 30, 2003 to \$49 million.

B. Term Loans – On September 30, 1994, the Company entered into a \$10,000 7-year multicurrency term loan agreement to finance the acquisition of CMT Dasco SA. Under this agreement, as amended, the Company was required to make quarterly principal payments of \$158 plus interest through December 31, 2001, with the final installment due March 31, 2002 in the amount necessary to repay in full the unpaid principal balance. Interest was payable at fixed rates ranging from 6.0% to 6.65%. As of December 31, 2000, the Company had outstanding \$2,375 under the term loan. The loan was repaid on January 18, 2002 from the proceeds of Senior Subordinated Notes (Note 5f).

On June 1, 1993, the Company entered into a \$10,000 term loan agreement. Under such agreement as amended, the Company was required to make quarterly principal payments of \$250 through December 31, 2001, with the final installment due March 31, 2002, in the amount necessary to repay in full the unpaid principal balance. Interest was payable quarterly based upon prevailing LIBOR rates plus 2.75% margin on the outstanding principal balance. As of December 31, 2000, the Company had outstanding \$2,500 of borrowings under the term loan. The loan was repaid on January 18, 2002 from the proceeds of Senior Subordinated Notes (Note 5f).

During 1994, the Company entered into a \$4,500, 7-year, 7.65% fixed rate term loan agreement to finance the acquisition of a division of EMS, TOGO, Ltd. Under such agreement, the Company was required to make semi-annual principal payments of approximately \$224 beginning May 1, 1994 through November 1, 2000. The remaining unpaid principal balance at December 30, 2000 of \$1,567 was repaid from proceeds of short-term debt in January 2001.

On January 18, 2002, the Company refinanced two short-term facilities with one of the lenders under the Senior Revolver. Pursuant to a \$6 million Uncommitted Facility Agreement dated February 1996, as amended, the Company had outstanding borrowings of \$3,258 as of December 31, 2000. Borrowings under the facility were due on demand and bear interest based upon prevailing LIBOR rates plus 2.5% margin. Pursuant to a \$5 million Offering Basis Loan Agreement dated June 2000, as amended, the Company had outstanding borrowings of \$3,948 as of December 31, 2000. Borrowings under the facility were due on demand and bear interest based upon the prevailing prime rate plus 1% margin. The refinancing, among other things, converted the then outstanding borrowings under the Uncommitted Facility and the Offering Basis Loan to terms loans, with all principal becoming due on January 1, 2004 and the lender was granted a second priority interest in the collateral provided under the Senior Revolver. As a result of the refinancing, the outstanding borrowings under the Uncommitted Facility and the Offering Basis Loan were classified as long-term debt in the accompanying balance sheet as of December 31, 2000.

C. Industrial Revenue Bond - The Company assumed a variable rate industrial revenue bond in the Bencyn acquisition (Note 2) that was used for financing a manufacturing facility in Lafayette, IN. Interest (5.2% at December 31, 2000) is payable quarterly. Principal was to be repaid in varying amounts beginning October 2001 through October 2012. A bank letter of credit that was issued as collateral for the bond is scheduled to expire October 2002. In connection with the issuance of Senior Subordinated Notes (Note 5f), proceeds were placed in escrow to prepay the Bond in February 2002.

D. Financial Instruments - The Company enters into interest rate hedge agreements to change the fixed/variable interest rate mix of its debt portfolio to reduce the Company's aggregate risk to movements in interest rates. These agreements are accounted for using settlement accounting.

The Company closed out a \$25,000 interest rate swap in August 1999 for a pretax gain of \$1,413. The gain is amortized as a reduction of interest expense over the remaining four years of the agreement. \$329 and \$123 was credited against interest expense in 2000 and 1999, respectively.

In April 1999, the Company entered into an interest rate swap in Europe expiring in April 2004 for a notional amount of approximately \$17,800 where the Company pays a fixed rate of 3.40% in exchange for European 3-month LIBOR rates. In February 2000, the terms of the agreement were revised whereby after January 13, 2000 the fixed rate was lowered to 2.84% unless the LIBOR rate exceeds 6.00%. In such event, the fixed rate equals the LIBOR rate except for the period from January 13, 2000 to July 13, 2001 during which the fixed rate is not to exceed 7.00%.

In June 2000, the Company entered into two interest rate collar agreements under which it is reimbursed the excess of a variable rate above a stated maximum rate and is responsible for payment of the excess of the variable rate below a stated minimum rate. One collar expiring in April 2002 is for a notional amount of \$7,000 and is based upon US 3-month LIBOR with maximum and minimum rates of 9.25% and 6.55%, respectively. The other collar expiring in April 2002 is for a notional amount of approximately \$5,700 and is based upon European 3-month LIBOR with maximum and minimum rates of 7.25% and 4.81%, respectively.

At December 31, 2000, the Company had letters of credit outstanding totaling \$15,904 which support certain debt instruments of subsidiaries and guarantee performance of certain trade activities.

E. Compliance - The loan agreements require the Company to comply with certain covenants such as maintaining minimum financial ratios and tangible net worth. Certain covenants also limit the payment of dividends and repurchase of common stock. The Company was not in compliance with certain financial covenants for the year ended December 31, 2000 and for interim periods during 2001. However, on January 18, 2002 the Company obtained an appropriate waiver for non-compliance and an amendment which modifies the measurement criteria of the financial covenants (Note 5a). In addition, the Company agreed to pledge as collateral to its lenders domestic accounts receivable, inventory, property, plant and equipment and stock in certain subsidiaries.

F. Issuance of Senior Subordinated Notes - On January 18, 2002, the Company issued \$25 million of Senior Subordinated Notes with detachable warrants to purchase 7.5% of the fully diluted common stock of the Company at a nominal exercise price. The Notes bear interest at 14% per annum, of which 12% is payable monthly and 2% is deferred and payable on the fifth anniversary date. Beginning with the seventh anniversary date, the Notes become payable in 2 equal annual payments. The Notes are subordinate to collateral pledged under the Company's existing senior debt. The warrant holders have the right to sell the warrants or common stock received from exercise of the warrants to the Company at fair market value beginning on the fifth anniversary date or earlier under certain circumstances. Approximately \$20.9 million from the proceeds of the Notes were used to repay senior debt with the remaining amount used for working capital and transaction costs.

Fixed maturities of the Company's debt (after consideration of the issuance of Senior Subordinated Notes (Note 5f) and the Waiver and Amendment to the Senior Revolver (Note 5a)) are as follows:

2001	\$12,167
2002	10,125
2003	4,775
2004	61,480
2005	186
2006 and thereafter	<u>6,343</u>
Total	<u>\$95,076</u>

6. STOCK PURCHASE PLANS

Pursuant to the Key Employee Stock Purchase Plan adopted by the Company in 1987 and the Outside Director Stock Purchase Plan adopted in 1992, participating eligible employees (as determined by the Board of Directors) of the Company and its subsidiaries and participating outside directors (as determined by the Executive Committee of the Board of Directors) are provided the opportunity to purchase stock of the Company. Each participant may purchase, within ten days of the offer, shares of stock at the fair market value, as determined by the Company's independent appraisal firm, on the date the offer is made.

During 2000 and 1999, the Company issued 5,000 and 1,300 shares of common treasury stock to participants in the plans at \$17.00 and \$24.00 per share, respectively. At December 31, 2000, 81,379 shares of common treasury stock are reserved for issuance under the Key Employee Stock Purchase Plan and 81,000 shares are reserved under the Outside Directors Stock Purchase Plan.

At December 31, 2000 and 1999, the Company had promissory notes receivable of \$74 and \$223, respectively related to current and prior issuances. Such notes are repayable up to five years from the date of issuance at interest rates ranging from 6% to 7% on the unpaid principal balance. The notes are collateralized by a pledge of the stock issued. In addition to the Key Employee Stock Purchase Plan and Outside Director Stock Purchase Plan, the Company periodically sells treasury stock to employees and Directors and may finance such purchases with promissory notes.

7. STOCK OPTION PLANS

The Company maintains various stock incentive plans that have been approved by the shareholders to attract, retain and motivate key employees and non-employee directors. The Equity Compensation Plan (the "1993 Plan") provides for the grant of stock options, stock appreciation rights and/or restricted stock to certain key employees and non-employee directors of the Company. A predecessor plan, the 1983 Stock Option Plan (the "1983 Plan") provided for the grant of incentive stock options to certain key employees. The 1983 Plan terminated on December 1, 1992 except for options granted and outstanding, the remainder of which expired during 2000. The Stock Option Plan for Key Employees and Directors (the "1990 Plan") provides for the grant of non-qualified stock options and/or stock appreciation rights. The 1990 Plan is currently inactive.

Under the plans, the option period may not exceed 10 years (in the case of incentive stock options, not more than 5 years for individuals who own more than 10% of the voting power of the Company's stock at the date of grant). The options granted under the plans may be exercised, subject to cumulative annual limits not exceeding 25%, beginning with the date of grant or first anniversary thereafter. Options under the 1993 Plan and 1983 Plan may be exercised at not less than 100% of the fair market value (as determined by the Company's independent appraisal firm) of the Company's stock at the date the option was granted (in the case of incentive stock options, at not less than 110% of the fair market value for individuals who own more than 10% of the voting power of the Company's stock at the date of grant). Options under the 1990 Plan may be exercised at not less than 50% of the fair market value of the Company's stock at the date the option was granted. Options granted, exercised and expired during

2000 and 1999 as summarized below:

	Shares	Stock Options Price Range Per Share	Weighted Average Exercise Price
Outstanding, December 31, 1998	502,906	\$13.90 - \$23.00	\$17.05
Granted	0	—	—
Exercised	132,351	\$13.90 - \$20.00	14.34
Forfeited	<u>25,352</u>	\$13.90 - \$23.00	16.09
Outstanding, December 31, 1999	<u>345,203</u>	\$13.90 - \$23.00	\$18.17
Granted	142,900	\$17.00 - \$18.70	\$17.06
Exercised	16,666	\$13.90 - \$15.00	14.54
Forfeited	<u>55,666</u>	\$13.90 - \$23.00	17.78
Outstanding, December 31, 2000	<u>415,771</u>	\$15.00 - \$23.00	\$17.97

Range of Exercised Prices	Number of Shares		Weighted Average Remaining Contractual Life in Years
	Outstanding	Exercisable	
\$15.00	130,497	110,486	3.0
17.00	137,900	0	10.0
18.70	5,000	0	5.0
20.00	65,650	65,650	5.0
23.00	<u>76,724</u>	<u>57,543</u>	<u>6.6</u>
	<u>415,771</u>	<u>233,679</u>	<u>6.3</u>

As of December 31, 2000 and 1999, respectively, there were 22,826 and 134,060 shares of common treasury stock available for grants under the 1993 Plan and 900,000 shares available for grants under the 1990 Plan. As of December 31, 2000 and 1999, 233,679 and 272,668 options were exercisable at weighted average exercise prices of \$18.37 and \$16.52, respectively.

The Company accounts for the incentive and nonqualified stock option plans in accordance with Accounting Principles Board Opinion No. 25, under which compensation cost is recognized based on the difference, if any, between the appraised fair value of the Company's stock at the time of option grant and the amount the employee must pay to acquire the stock. The Company's options have been issued at fair market value at the time of grant. Had compensation cost for stock options been determined consistent with Statement of Financial Accounting Standards No. 123, Accounting for Stock-Based Compensation (SFAS 123), the Company's pro forma net income (loss) and earnings (loss) per share for the year ended December 31, 2000 would have been \$(1,066) and \$(0.25) and for the year ended December 31, 1999 would have been \$1,119 and \$0.29. In accordance with the requirements of SFAS 123, this method of accounting has not been applied to options granted prior to the fiscal year beginning January 1, 1995. The resulting pro forma compensation cost may not be representative of that to be expected in future years.

The fair value of each stock option grant is estimated on the date of grant (\$4.69 in 2000) using the Black-Scholes option pricing model with volatility assumed to be zero and the following weighted average assumptions used for grants in 2000 and 1999: risk-free interest rates of 5.26% and 6.53%, respectively; expected dividend yields of 1.35% and expected lives of ten years for the options granted December 15, 1995; June 6, 1997; December 22, 1997; and December 18, 2000.

8. DEFERRED COMPENSATION

Deferred compensation consists primarily of government mandated severance payments in certain foreign countries and retirement benefits for the former owners of certain foreign companies acquired in 1992.

9. CHANGES IN COMPONENTS OF STOCKHOLDERS' EQUITY

A summary of changes in components of stockholders' equity is as follows:

	Accumulated Other Comprehensive Income (loss)	Additional Paid-In Capital	Treasury Stock Amount	Shares
Balance at December 31, 1998	\$ (7,893)	\$ 6,550	\$(65,302)	(6,726,206)
Purchase of common stock for treasury			(3,629)	(156,408)
Stock purchase plans (Note 6)		28	4	1,300
Stock options exercised (Note 7)		1,458	440	132,351
401(k) Plan purchase of stock		341	67	20,236
Sale of common stock from treasury		48	9	2,650
Net effect of translation adjustments	(3,247)			
Stock subscription forfeiture		(133)		
Balance at December 31, 1999	(11,140)	8,292	(68,411)	(6,726,077)
Purchase of common stock for treasury			(724)	(38,944)
Stock purchase plans (Note 6)		67	18	5,000
Stock options exercised (Note 7)		183	59	16,666
Acquisition of Bencyn, Inc. (Note 2)		9,410	1,597	458,650
401(k) Plan purchase of stock		360	95	26,767
Sale of common stock from treasury		27	7	2,000
Net effect of translation adjustments	(4,500)			
Balance at December 31, 2000	<u>\$(15,640)</u>	<u>\$18,339</u>	<u>\$(67,359)</u>	<u>(6,255,938)</u>

Accumulated other comprehensive income (loss) consists of accumulated translation adjustment

10. EMPLOYEE PENSION PLANS

The Company has pension plans covering substantially all US salaried and hourly employees (hereafter "domestic plans") and Canadian and English employees (hereafter "foreign plans").

The domestic plans provide benefits based on an employee's years of service and compensation received for the highest five consecutive years of earnings. The foreign plans provide benefits based on a formula of years of service and a percentage of compensation which varies among the foreign plans. Pension expenses and funded status data is presented as of December 31, 2000 and 1999, respectively, except for the plan assets at fair value for the English plan, which are determined as of September 30, 2000 and 1999, respectively. The Company's funding policy is consistent with funding requirements of applicable government laws and regulations.

	Year Ended December 31			
	2000		1999	
	<u>Domestic</u>	<u>Foreign</u>	<u>Domestic</u>	<u>Foreign</u>
Net Pension Expense (income):				
Service cost - benefits earned during period	\$ 787	\$ 657	\$ 864	\$ 1,049
Interest cost on projected benefit obligation	1,483	2,181	1,436	2,092
Return on plan assets	(2,746)	(2,828)	(2,547)	(2,509)
Net amortization and deferral	(361)	8	(165)	363
Employee contribution	<u>0</u>	<u>(413)</u>	<u>0</u>	<u>(417)</u>
Net pension expense (income)	<u>\$ (837)</u>	<u>\$ (395)</u>	<u>\$ (412)</u>	<u>\$ 578</u>
Reconciliation of Projected Benefit Obligation and Plan Assets				
Change in Projected Benefit Obligation:				
Benefit obligation beginning year	\$20,460	\$36,477	\$21,818	\$37,602
Service costs	787	1,003	864	1,422
Interest costs	1,483	2,181	1,436	2,092
Amendments	91	19	0	248
Actuarial (gains) losses	(114)	643	(2,435)	1,394
Benefits paid	<u>(1,205)</u>	<u>(1,750)</u>	<u>(1,222)</u>	<u>(3,390)</u>
Benefit obligation end of year	\$21,502	\$38,573	\$20,461	\$39,368
Change in Plan Assets:				
Fair value of plan assets at beginning of year	\$31,126	\$37,634	\$28,914	\$36,101
Actual return on plan assets	(1,313)	4,496	3,435	6,647
Employer Contributions	0	804	0	919
Plan participants contributions	0	413	0	417
Benefits paid	<u>(1,205)</u>	<u>(1,814)</u>	<u>(1,222)</u>	<u>(3,462)</u>
Fair value of plan assets end of year	\$28,608	\$41,533	\$31,127	\$40,622
Funded status:	\$ 7,106	\$ 2,960	\$10,666	\$ 1,254
Unrecognized gain past experience	(4,871)	(920)	(9,317)	56
Unrecognized net transition cost	(283)	(218)	(322)	(294)
Unrecognized prior service cost	971	398	1,059	476
Adjustment minimum liability	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Prepaid benefit cost	<u>\$ 2,923</u>	<u>\$ 2,220</u>	<u>\$ 2,086</u>	<u>\$ 1,492</u>
Discount rate	7.50%	5.75% - 6.75%	7.75%	6.0% - 7.0%
Rate of return on assets	9.00%	7.25% - 7.5%	9.00%	7.5%
Salary growth	4.0%	3.75% - 4.0%	5.00%	4.0%
Amortization period (years)	13	3 - 18	13 - 22	3 - 18

11. INCOMETAXES

The provision for income taxes is summarized as follows:

	Year Ended December 31	
	2000	1999
Current:		
US Federal	\$ 196	\$ 30
US State	125	103
Foreign	<u>1,883</u>	<u>566</u>
Total current	2,204	699
Deferred	<u>(198)</u>	<u>115</u>
Total	<u>\$2,006</u>	<u>\$ 814</u>

Effective Tax Rate

The difference between the worldwide effective tax rate and the US statutory tax rate of 34% results primarily from higher foreign taxes, foreign losses, amortization of goodwill and the effect of state taxes. Brazilian tax loss carryforwards total \$4,749, German tax loss carryforwards total \$11,865, Thai tax loss carryforwards total \$1,513, and other loss carryforwards of approximately \$5,785.

Deferred income taxes arise due to certain items being includable in the determination of taxable income in periods different than for financial reporting purposes. The tax effect of significant types of temporary differences and carryforwards that give rise to the Company's deferred tax assets and liabilities as of December 31, 2000 and 1999 follows:

	2000	1999
Deferred Tax Assets:		
Fixed assets	\$ 456	\$ 8
Accrued expenses	1,917	1,569
Deferred revenue	388	516
Inventory	309	364
Tax loss carryforwards	7,488	7,754
Foreign credit carryforwards	1,704	391
Other	<u>(47)</u>	<u>(692)</u>
Gross deferred tax assets	12,215	9,910
Valuation allowance	<u>(8,555)</u>	<u>(7,718)</u>
	<u>3,660</u>	<u>2,192</u>
Deferred Tax Liabilities:		
Prepaid expenses	<u>(1,160)</u>	<u>(29)</u>
	<u>(1,160)</u>	<u>(29)</u>
Net deferred tax assets	<u>\$ 2,500</u>	<u>\$ 2,163</u>

The valuation allowance relates primarily to foreign tax loss carryforwards and foreign tax credit carryforwards.

No provision has been made for undistributed earnings of certain subsidiaries (aggregating approximately \$33,879 and \$33,922 at December 31, 2000 and 1999, respectively), which earnings are not expected to be paid to the Company as dividends, since future investment requirements are in excess of these earnings.

12. OTHER ASSETS

Other assets are comprised of the following:

	December 31	
	2000	1999
Excess of cost over net assets of acquired companies	\$33,073	\$21,454
Prepaid pension costs	5,143	3,578
Other assets	1,698	3,358
Deferred tax assets	1,296	3,812
Total	<u>\$41,210</u>	<u>\$32,202</u>

13. FUTURE MINIMUM RENTAL PAYMENTS

The future minimum rental payments required under operating leases that have initial or remaining noncancellable lease terms in excess of one year as of December 31, 2000 are as follows:

2001	\$2,702
2002	2,221
2003	1,680
2004	1,120
2005	750
2006 and thereafter	1
Total	<u>\$8,474</u>

Rent expense for 2000 and 1999 on operating leases aggregated \$3,801 and \$2,474, respectively.

14. COMMITMENTS AND CONTINGENCIES

The Company has participated in certain payments in connection with a series of Environmental Protection Agency consent orders related to certain hazardous waste cleanup activities under the federal Superfund statute. Cleanup activities at a Superfund site in which the Company is participating are in the final phase, which includes groundwater remediation procedures. Based upon current estimates, the total cost of this phase is not expected to have a material effect upon the Company's consolidated financial statements.

Additionally, there are various claims and pending actions against the Company and its subsidiaries arising out of the normal conduct of its business.

In the opinion of the Company's management, the resolution of the above matters will not have a material adverse impact on the consolidated financial position or the consolidated results of operations.

15. CONCENTRATIONS OF CREDIT RISK

Credit risk represents the accounting loss that would be recognized at the reporting date if counterparties failed completely to perform as contracted. Concentrations of credit risk (whether on or off balance sheet) that arise from financial instruments exist for groups of customers or counterparties when they have similar economic characteristics that would cause their ability to meet contractual obligations to be similarly affected by changes in economic or other conditions. The Company does not have a significant exposure to any individual customer or counterparty. The amounts of credit risk shown, therefore, do not represent expected losses.

The major concentrations of credit risk arise from the Company's receivables in relation to the geographical location of customers, as presented in the following table.

	December 31	
	2000	1999
North America	\$28,142	\$21,365
Europe	34,564	33,533
Asia & Pacific	5,877	6,026
Other	1,231	749
	<u>\$69,814</u>	<u>\$61,673</u>

16. FAIR VALUE OF FINANCIAL INSTRUMENTS

The following disclosure of the estimated fair value of financial instruments is made in accordance with SFAS No. 107, Disclosures about Fair Value of Financial Instruments. The estimated fair value amounts have been determined by the Company using available market information and appropriate valuation methodologies.

For short-term debt and long-term debt the rates currently available to the Company for debt with similar terms and remaining maturities are used to estimate the fair value for debt outstanding. At December 31, 2000 the fair value of such debt instruments approximates the carrying value. The fair value of interest rate hedge agreements (Note 5D) as of December 31, 2000 was approximately \$588.

17. NON-RECURRING OPERATING EXPENSES

Operating income for 2000 includes non-recurring expenses of \$5,157 comprised of \$3,400 related to streamlining initiatives, \$1,259 related to costs of obtaining and developing computer software for internal use and \$498 related to post-retirement benefit adjustments.

The streamlining initiatives concerned operational capacity realignments in the US and Europe resulting in the elimination of 106 employee positions through primarily involuntary severance programs. \$558 of severance related costs remained unpaid at December 31, 2000. The costs of computer software for internal use relate to an enterprise information systems project in the US. This project was accounted for in accordance with AICPA Statement of Position 98-1 whereby certain costs incurred during the application development stage were capitalized while costs incurred during the preliminary project and post-implementation stages and all costs for training and data conversion were charged to expense as incurred. Adjustments to post-retirement benefits pertain to prior year corrections to properly reflect the provisions of certain post-retirement pension and death benefit arrangements.

18. OTHER EVENTS

On July 31, 2001, the Company sold Durferri GmbH, a German subsidiary, for aggregate proceeds of approximately \$15.8 million of which \$7.9 million was paid at closing, \$7.0 million is due in 2002 and the remainder is due in equal installments in 2003 and 2004. Of the initial proceeds, \$7.0 million was used to repay the Senior Revolver (Note 5a).

The Company's 50% owned affiliate in Korea discovered that an embezzlement of funds occurred. The Company has recorded a charge of \$1,043 in equity in net income of affiliates in the accompanying statement of income for the year 2000 to reflect its share of the losses.

REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors and Shareholders of Houghton International Inc.

In our opinion, the accompanying consolidated balance sheet as of December 31, 2000 and the related consolidated statements of income and comprehensive income and retained earnings and of cash flows present fairly, in all material respects, the financial position of Houghton International Inc. and subsidiaries (the "Company") at December 31, 2000, and the results of their operations and their cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit of these statements in accordance with auditing standards generally accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion. The financial statements of the Company as of December 31, 1999 and for the year then ended were audited by other independent accountants whose report dated March 3, 2000, except Note 5 as to which the date is April 13, 2000, expressed an unqualified opinion on those statements.

PricewaterhouseCoopers LLP

Philadelphia, Pennsylvania

March 16, 2001, except Notes 1B, 5 and 18 as to which the date is January 18, 2002.

DIRECTORS AND OFFICERS

CORPORATE OFFICERS

William F. MacDonald, Jr.
Chief Executive Officer

John D. Brennan
President - Houghton FLUIDCARE

Donald N. Marentette
Vice President - Sales

Thad L. Piatkowski
President - Houghton Metal Finishing

Rosauro V. Holgado
Vice President - Technical Service

Dr. Joseph F. Warchol
Vice President - Technical

Stephen B. Harris
Vice President/Secretary - Treasurer

Richard E. Niwinski
Controller

BOARD OF DIRECTORS

The following listing reflects board
composition as of March 31, 2001

John D. Brennan
President - Houghton FLUIDCARE

Charles P. Connolly, Jr.
*Retired President and CEO,
First Union National Bank
Pennsylvania and Delaware*

Theodore G. Kauffman
Private Investor

William F. MacDonald, Jr.
Chairman of the Board and CEO

David W. Moser
*President
Durabla Manufacturing Company*

W. Lloyd Snyder III
*Principal, Snyder and Company
Chairman of the Board,
Huff Paper Company*

North American Sales Offices and Plants

ALLENTOWN
Iron Run Industrial Park
6681 Snowdrift Road
Fogelsville, PA 18051

CANADA
Houghton Canada Inc.
100 Symes Road
Toronto M6P 3J5, Ont.

CARROLLTON
421 Garrett Street
Carrollton, GA 30117

CHICAGO
6600 S. Nashville Avenue
Chicago, IL 60638

DETROIT
14275 Lumpkin Avenue
Detroit, MI 48212

HOUSTON*
1918 Collingsworth Street
Houston, TX 77215

LAFAYETTE
3150 South County Road 460 East
Lafayette, IN 47905

LONGVIEW
1165 Columbia Boulevard
Longview, WA 98632

HOUGHTONFLUIDCARE
3150 South County Road 460 East
Lafayette, IN 47905

HOUGHTONMETALFINISHING CO.
1075 Windward Ridge Parkway
Suite 180
Alpharetta, GA 30005

WIRELUBE RESEARCH CO.
17350 Highway 61 North
Lynn, MS 38645

*Warehouse Location

Worldwide

AUSTRALIA
Houghton Australia Pty. Ltd.

BRAZIL
Houghton Brasil LTDA

CHINA
Houghton (China) Co., Ltd.

DENMARK
Houghton Danmark A/S

FRANCE
Houghton S.A.

GERMANY
Houghton Deutschland GmbH

HONG KONG
Houghton Oils & Chemicals
(Far East) Co., Ltd.

IRELAND
Houghton Oils & Chemicals
(Ireland) Ltd.

ITALY
Houghton Italia S.p.A.

JAPAN
Houghton Japan Co., Ltd.

KOREA
Korea Houghton Corp.

MEXICO
Especialidades Químicas
Monterrey

THE NETHERLANDS
Houghton Benelux BV

NORWAY
Houghton Norge A.S.

SINGAPORE
Houghton Singapore

SPAIN
Houghton Iberica S.A.

SWEDEN
Houghton Sverige AB

SWITZERLAND
Houghton (Schweiz) AG

TAIWAN
Houghton Taiwan Co., Ltd.

THAILAND
Thai Houghton 1993 Co., Ltd.

UNITED KINGDOM
Houghton plc

HOUGHTON INTERNATIONAL INC.



**Annual Report
2001**

North American Sales Offices and Plants

ALLENTOWN
6681 Snowdrift Road
Fogelsville, PA 18106

CANADA
Houghton Canada Inc.
100 Symes Road
Toronto M6P 3J5, Ont.

CARROLLTON
421 Garrett Street
Carrollton, GA 30117

CHICAGO
6600 S. Nashville Avenue
Chicago, IL 60638

DETROIT
14275 Lumpkin Avenue
Detroit, MI 48212

HOUSTON*
1918 Collingsworth Street
Houston, TX 77215

LAFAYETTE
3150 South County Road 460 East
Lafayette, IN 47905

LYON
17350 Highway 61 North
Lyon, MS 38645

HOUGHTON FLUIDCARE
3150 South County Road 460 East
Lafayette, IN 47905

HOUGHTON METAL FINISHING CO.
1075 Windward Ridge Parkway
Suite 180
Alpharetta, GA 30005

*Warehouse Location

Worldwide

AUSTRALIA
Houghton Australia Pty. Ltd.

BRAZIL
Houghton Brasil LTDA

CHINA
Houghton (China) Co., Ltd.

DENMARK
Houghton Danmark A/S

FRANCE
Houghton S.A.

GERMANY
Houghton Deutschland GmbH

HONG KONG
Houghton Oils & Chemicals
(Far East) Co., Ltd.

IRELAND
Houghton Oils & Chemicals
(Ireland) Ltd.

ITALY
Houghton Italia S.p.A.

JAPAN
Houghton Japan Co., Ltd.

KOREA
Korea Houghton Corp.

MEXICO
Especialidades Quimicas
Monterrey

THE NETHERLANDS
Houghton Benelux BV

NORWAY
Houghton Norge A/S

POLAND
Houghton Polska SP. Z.O.O.

SINGAPORE
Houghton Singapore

SPAIN
Houghton Iberica S.A.

SWEDEN
Houghton Sverige AB

SWITZERLAND
Houghton (Schweiz) AG

TAIWAN
Houghton Taiwan Co., Ltd.

THAILAND
Thai Houghton 1993 Co., Ltd.

TURKEY
Houghton Kimya Sanayi A.S.

UNITED KINGDOM
Houghton plc

FINANCIAL HIGHLIGHTS

	2001	2000
For the year	(in thousands of dollars except per-share data)	
Sales	\$302,795	\$313,367
Net income (loss)	2,113	(993)
Per common share		
Earnings	\$ 0.49	\$ (0.23)
At year end		
Total assets	\$221,530	\$230,390
Shareholders' equity	61,259	62,233

Houghton International Inc. is an independent supplier of specialty processing products and service for the metalworking industry. Founded in 1865, the Company completed its 136th year in 2001.

International Affiliates	IFC
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Directors and Officers	IBC

TO OUR SHAREHOLDERS:

The year 2001 proved to be the most challenging economic environment for companies serving the manufacturing sector since the Depression Era. In our key North American market, manufacturing activity continued the decline that had started in the latter part of 2000 and dropped every month throughout the year. The rest of the world did not fare much better with the difference being the slope and extent of the decline. The terrorist attack of September 11 made an already weak situation worse and the year concluded with a very quiet close. Although automotive sales proved resilient, car makers ran down inventory levels and fourth quarter production activity was very weak. Amidst all this negative news, business faced a severe credit crunch as the banking sector reduced credit availability and stiffened lending terms for virtually all borrowers. This reality unfolded despite the Federal Reserve's successive interest rate cuts and substantial additions to the nation's money supply. Two thousand and one was a year that we shall not soon forget.

Our plan for the year envisioned two major programs, first to improve our financial results and second to bolster our underlying balance sheet. Our operational imperatives were to re-engineer our organization to achieve a much higher level of profit realization and to develop the Company's strategy of becoming the World Leader in the management of chemical processes for industry. Our refinancing plans were to sell some of our assets to reduce our bank debt, to place some subordinated debt to reduce our bank debt further and to enter into a new bank debt agreement. I am happy to report that we accomplished all of these primary objectives of our plan for the year despite the difficult economic environment and have positioned our Company for the economic rebound that

now seems to be developing at a still to be determined speed.

Our profit improvement initiatives included eliminating manufacturing at our Raleigh Plant, closing our Longview Plant, and downsizing manufacturing at our Chicago Plant. We also undertook a procurement initiative to bring in competitive suppliers and drive down our cost of materials. We reduced our sales and marketing expense and centralized order entry in Valley Forge. In Europe, we initiated a long overdue centralization of business functional activities and began a continuing process of formulation, procurement and manufacturing rationalization. We also undertook a worldwide price initiative that finally brought our operating margins in line with the material cost increases we had been incurring over the last several years. The major part of our profit improvement program has been completed but there is still more to come in 2002, particularly in Europe.

Houghton Fluidcare, our chemical management company, expanded throughout the year. We continued to take over Eaton plants around the world in connection with our important contract with that company. We made substantial inroads at Ford Motor as well, in addition to our extensive partnership with DaimlerChrysler. We further developed our extensive business with Volkswagen and picked up substantial new business outside the automotive sector. In total, Houghton Fluidcare more than doubled its business last year and has now installed an infrastructure capable of taking on a higher level of business. We picked up several more contracts early in 2002 and are in a good position to expand our service to the marketplace.

We decided to sell our Durferfrit business based in Germany in order to reduce

our bank debt. This is a solid, professionally run business, but is not central to our strategy. We decided to sell it when a prospective buyer, also in the business, showed interest in acquiring Durferit and consolidating the two businesses into one more effective and economical operation. We concluded this transaction in July, paid down some part of our bank debt with the proceeds received, and will do the same as the remaining proceeds are received, mostly during 2002. We also closed our Longview Plant and are marketing that property. We sold a warehouse in The Netherlands and have a couple of other small properties for sale in Europe. In Australia, we are in process of closing our Sydney Plant and selling that real estate.

We spent considerable effort during the second half preparing a subordinated debt offering, meeting with prospective investors and finally closing the transaction in January of 2002. In conjunction with that process, we entered into a new bank agreement which thereby completed our extensive refinancing projects. Kudos to Steve Harris for a long, yeoman's performance in gathering all the information required for the offering, due diligence and closing. Under our new financial arrangements, we do not have the clearance to resume dividend payments or stock redemptions. Clearly, we have to demonstrate that our plans in place will be executed over the next year.

What we have to do in 2002 and into the future is to realize our budgeted financial targets. We have made the necessary changes to bring the cost of our operations to a more economical basis without losing effectiveness. We have strong management teams everywhere in the world with reasonable expectations for growth and profitability

as well as a continuing commitment to seek out opportunities for profit improvement. We expect our business now to rebound with the higher level of economic activity that seems to be developing. We are keeping a close control on costs while aggressively seeking new business.

To reiterate, 2001 was a very difficult year for our Company. We have come through it lean, mean and capable. We have more business relationships at the end of the year than at the start. We have lower costs and higher margins at year end than at the beginning. We have a dedicated, hard working team around the world that is working closely together to grow Houghton's business on a profitable basis. We can use a better economic environment to demonstrate just how good and profitable we have become, but are not waiting for a huge turn and will plan ahead to realize every possible new avenue for business and profit improvement. Hempstead & Co. has concluded that the value of a share of Houghton International common stock as of December 31, 2001 is \$17.00.

On behalf of management and the Board of Directors, I thank you for your continued support of our endeavors.

Sincerely,



William F. MacDonald, Jr.
Chairman of the Board

CONSOLIDATED BALANCE SHEETS

December 31, 2001 and 2000

(Dollars in thousands except share and per share amounts)

ASSETS	2001	2000
CURRENT ASSETS:		
Cash and cash equivalents	\$ 8,027	\$ 7,070
Trade receivables (less allowance for doubtful accounts and discounts - 2001, \$3,664; 2000, \$3,692)	65,960	69,814
Inventories	30,894	36,373
Other current assets	15,037	3,230
Deferred income taxes	1,924	2,945
Total current assets	121,842	119,432
INVESTMENTS AND ADVANCES:		
Equity affiliates	6,581	6,354
Other	651	702
Total investments and advances	7,232	7,056
PROPERTY, PLANT AND EQUIPMENT:		
Land and buildings	46,221	54,266
Machinery and equipment	80,626	82,298
Leasehold improvements	390	403
Construction in progress	874	6,230
Total	128,111	143,197
Less accumulated depreciation and amortization	76,499	80,505
Total property, plant and equipment, net	51,612	62,692
OTHER ASSETS	40,844	41,210
TOTAL	<u>\$221,530</u>	<u>\$230,390</u>

See notes to consolidated financial statements.

LIABILITIES AND STOCKHOLDERS' EQUITY	2001	2000
CURRENT LIABILITIES:		
Short-term debt	\$ 7,735	\$ 7,365
Current portion of long-term debt	9,750	12,167
Accounts payable	40,629	42,216
Accrued compensation and other	13,812	14,817
Income taxes payable	1,414	76
Deferred income taxes	2,607	1,160
Total current liabilities	75,947	77,801
LONG-TERM DEBT	77,841	82,909
OTHER LIABILITIES:		
Deferred compensation	3,854	6,006
Deferred income taxes	769	581
Minority interests and other	1,860	860
Total other liabilities	6,483	7,447
COMMITMENTS AND CONTINGENCIES (See Note 14)		
STOCKHOLDERS' EQUITY:		
Capital stock - par value, \$.50 a share:		
Noncumulative 6% voting preferred, call price \$.53 a share - authorized 500,000 shares	—	—
Common stock - par value, \$.50 a share: authorized 25,000,000; issued 10,613,600 shares	5,307	5,307
Additional paid-in capital	18,416	18,339
Retained earnings	123,773	121,660
Accumulated other comprehensive income (loss)	(18,521)	(15,640)
Total	128,975	129,666
Treasury stock, at cost (2001: 6,267,837 shares; 2000: 6,255,938 shares)	(67,666)	(67,359)
Notes receivable - stock purchase plan	(50)	(74)
Total	(67,716)	(67,433)
Total stockholders' equity	61,259	62,233
TOTAL	\$221,530	\$230,390

CONSOLIDATED STATEMENTS OF INCOME AND COMPREHENSIVE INCOME AND RETAINED EARNINGS

For the years ended December 31, 2001 and 2000

(Dollars in thousands, except per share amounts)

	2001	2000
NET SALES	\$302,795	\$313,367
COST OF GOODS SOLD	206,852	205,572
GROSS PROFIT ON SALES	95,943	107,795
OPERATING EXPENSES	87,170	93,404
NON-RECURRING EXPENSES (Note 17)	3,411	5,157
OPERATING INCOME	5,362	9,234
OTHER INCOME (EXPENSE):		
Equity in net income of affiliates	422	61
Exchange loss	(101)	(177)
Gain (loss) on disposal of property, plant and equipment	(704)	201
Gain on business disposal	5,760	-
Interest - net	(7,182)	(7,925)
Other miscellaneous income (expense) - net	(36)	(381)
Total	(1,841)	(8,221)
INCOME BEFORE INCOME TAXES	3,521	1,013
PROVISION FOR INCOME TAXES	1,408	2,006
NET INCOME (LOSS)	2,113	(993)
OTHER COMPREHENSIVE INCOME (LOSS), Net of Tax:		
Foreign currency translation adjustments	(2,795)	(4,500)
Cumulative effect of change in accounting principle (Note 1)	929	-
Net gain (loss) on derivative instruments (Note 16)	(781)	-
Minimum additional pension liability (Note 10)	(234)	-
COMPREHENSIVE INCOME (LOSS)	\$(768)	\$(5,493)
RETAINED EARNINGS AT BEGINNING OF YEAR	\$121,660	\$122,653
NET INCOME (LOSS)	2,113	(993)
RETAINED EARNINGS AT END OF YEAR	\$123,773	\$121,660
BASIC EARNINGS (LOSS) PER SHARE OF COMMON STOCK	\$0.49	\$(0.23)
DILUTED EARNINGS (LOSS) PER SHARE OF COMMON STOCK	\$0.48	\$(0.23)

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS

For the years ended December 31, 2001 and 2000

(Dollars in thousands)

	2001	2000
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net income (loss)	\$ 2,113	\$ (993)
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	9,768	9,134
Loss (gain) on disposal of property, plant and equipment	704	(201)
Gain on business disposal	(5,760)	-
Minority interest in earnings of subsidiaries	83	86
Deferred compensation	796	(866)
Deferred income taxes	1,638	(165)
Other	(515)	(175)
Changes in current assets and liabilities, net of effects of acquisitions:		
Accounts receivable and other assets	(5,665)	(4,002)
Inventories	(1,432)	(3,951)
Accounts payable and accrued expenses	3,494	7,482
Accrued income taxes payable	(1,845)	(678)
Net cash provided by operating activities	3,379	5,671
CASH FLOWS FROM INVESTING ACTIVITIES:		
Capital expenditures	(4,741)	(8,306)
Proceeds from disposal of property, plant and equipment	144	1,176
Proceeds from business disposal	7,950	-
Payments for acquisitions (net of cash acquired)	-	(2,524)
Other	12	69
Net cash provided by (used in) investing activities	3,365	(9,585)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Net proceeds (payments) of short-term debt - banks	370	(388)
Net proceeds from (purchases of) treasury stock and stock options	(230)	92
Net proceeds (payments) of long-term debt	(5,600)	5,341
Net cash provided by (used in) financing activities	(5,460)	5,045
EFFECT OF EXCHANGE RATE CHANGES ON CASH	(327)	(214)
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	957	917
CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR	7,070	6,153
CASH AND CASH EQUIVALENTS AT END OF YEAR	\$ 8,027	\$ 7,070

SUPPLEMENTAL DISCLOSURE OF CERTAIN NON-CASH INVESTING AND FINANCING ACTIVITIES AND OTHER CASH FLOW INFORMATION

Cash paid for income taxes was \$2,276 and \$2,893, and for interest was \$7,085 and \$8,133 in 2001 and 2000, respectively.

458,650 common shares with redemption options valued at \$11,008 were issued in connection with the acquisition of Bencyn, Inc. (Note 2).

Accounts payable at December 31, 2001 and 2000 includes \$1,180, and \$2,048 of capital expenditures, respectively.

See notes to consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

For the years ended December 31, 2001 and 2000

(Dollars in thousands, except share amounts)

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. Business – Houghton International Inc. is an independent supplier of specialty processing products and service for the metalworking industry. The principal markets for Houghton International Inc.'s products and services are the Americas, Europe and Asia.

B. Principles of Consolidation and Basis of Presentation – The consolidated financial statements include Houghton International Inc. and all majority owned and controlled subsidiaries (the "Company") and, on an equity basis, 20%-50% owned affiliates. All significant intercompany transactions and balances have been eliminated.

Total assets, liabilities and net income of equity affiliates amounted to \$37,550, \$24,624 and \$845, respectively in 2001 and \$38,620, \$26,018 and \$122, respectively in 2000.

Total assets, liabilities, and net income of consolidated foreign subsidiaries amounted to \$137,472, \$86,079, and \$5,029, respectively in 2001 and \$147,834, \$98,067, and \$663 respectively in 2000.

C. Revenue Recognition - Sales are generally recognized when products are shipped at which time title and risk of loss passes to the customer.

D. Shipping and Handling - The Company reports shipping and handling revenues as net sales and the related cost as cost of goods sold.

E. Inventories – Domestic inventories are priced using the last-in, first-out (LIFO) cost method. Such LIFO amounts represent 27% and 23% of the total 2001 and 2000 inventories prior to the LIFO adjustment, respectively. Other inventories are carried at the lower of cost or market, cost being determined by the first-in, first-out (FIFO) method.

	December 31	
	2001	2000
Raw materials	\$11,361	\$15,021
Work in process	196	956
Finished goods	19,337	20,396
Total	<u>\$30,894</u>	<u>\$36,373</u>

If the FIFO method of inventory valuation had been used for all inventories by the Company, inventories would have been \$8,477 and \$8,185 higher at December 31, 2001 and 2000, respectively.

F. Depreciation and Amortization – Depreciation and amortization are provided generally on a straight-line basis over the estimated useful lives of the related assets.

G. Excess of Cost Over Net Assets of Acquired Companies – Included in other assets is the unamortized excess of cost over net assets of acquired companies (goodwill). Such costs are being amortized on a straight-line basis over periods of 5 to 25 years (Note 12). Amortization expense was \$2,110 and \$1,976 in 2001 and 2000, respectively.

Statement of Financial Accounting Standards No. 142, Goodwill and Other Intangible Assets (SFAS 142) becomes effective January 1, 2002. SFAS 142 requires the use of a non-amortization approach to account for purchased goodwill and certain intangible assets. Management is currently evaluating the impact of implementing this new standard.

H. Earnings Per Share of Common Stock – For the years ended December 31, 2001 and 2000 basic and diluted EPS are computed using the weighted average number of shares of common stock outstanding. Common equivalent shares from options are included in the diluted computation when their effect is dilutive.

The following table shows the reconciliation between the numerators and denominators for the basic and diluted EPS calculations, where income is the numerator and the weighted average number of shares is the denominator.

	Year Ended December 31					
	2001			2000		
	Income	Shares	Per Share	Income	Shares	Per Share
Basic EPS						
Income (loss) available to common shareholders	\$2,113	4,352,564	<u>\$0.49</u>	\$(993)	4,320,990	<u>\$(0.23)</u>
Effect of Dilutive Securities Options	–	13,862		–	–	
Diluted EPS	<u>\$2,113</u>	<u>4,366,426</u>	<u>\$0.48</u>	<u>\$(993)</u>	<u>4,320,990</u>	<u>\$(0.23)</u>

- I. Cash and Cash Equivalents – Cash and cash equivalents represent cash in banks and short-term investments having an original maturity of less than three months.
- J. Foreign Currency Translation – The accounts of foreign subsidiaries and affiliates are measured using local currency as the functional currency. For those operations, assets and liabilities are translated into US dollars at period end exchange rates, and income and expense accounts are translated at average monthly exchange rates. Net gains or losses resulting from such translation are accumulated in other comprehensive income (loss) within stockholders' equity. Gains and losses from foreign currency transactions are included in other income.
- K. Income Taxes – The Company accounts for income taxes under the asset and liability method in accordance with Statement of Financial Accounting Standards (SFAS) No. 109, Accounting for Income Taxes (see Note 11).
- L. Environmental Expenditures – Environmental expenditures that relate to current or future revenues are expensed or capitalized as appropriate. Expenditures that relate to an existing condition caused by past operations, and do not contribute to current or future revenue generation, are expensed. Liabilities are recorded when environmental assessments and/or clean-ups are probable, and the costs can be reasonably estimated. Generally, the timing of these accruals coincides with the commitment to a formal plan of action.
- M. Impairment of Long-Lived Assets – In the event that facts and circumstances indicate that the cost of property, plant and equipment, goodwill or other assets may be impaired, an evaluation of recoverability would be performed. If an evaluation is required, the estimated future undiscounted cash flows associated with the asset would be compared to the assets' carrying amount to determine if a write-down to market value or discounted cash flow value is required.
- N. Estimates – The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results may differ from those estimates and assumptions.
- O. Derivatives and Hedging Activities – On January 1, 2001, the Company adopted Statement of Financial Accounting Standards No. 133, Accounting for Derivative Instruments and Hedging Activities, as amended (SFAS 133) and recorded the following net-of-tax cumulative-effect adjustments related to previously designated cash flow hedges in other comprehensive income:

Fair value of hedging instruments	\$352
Previously deferred hedging gains	<u>577</u>
Total cumulative effect in other comprehensive income	<u>\$929</u>

All derivatives are recognized on the balance sheet at their fair value. Currently, the Company

enters into derivative contracts to hedge exposures of interest rates (cash flow hedges). The changes in fair value of a derivative that is designated and qualifies as a cash flow hedge, to the extent that the hedge is effective, is recorded in other comprehensive income. Any hedge ineffectiveness (which represents the amount by which the changes in the fair value of the derivative exceed the variability in the cash flows of the forecasted transaction) is recorded in current-period earnings. When it is determined that a derivative is no longer effective as a hedge, the Company discontinues hedge accounting prospectively. When the Company discontinues hedge accounting because it is no longer probable that the forecasted transaction will occur in the originally expected period, the gain or loss on the derivative remains in accumulated other comprehensive income and is reclassified into earnings when the forecasted transaction affects earnings.

P. Reclassifications – Certain reclassifications have been made to conform prior years' balances to current year presentations.

2. BUSINESS ACQUISITION

In January 2000, the Company acquired Bencyn, Inc. and an associated real estate holding company located in Lafayette, IN for approximately \$13,809, including acquisition costs. Bencyn is a specialty processing products and services company. The purchase consideration consisted of \$2,400 in cash, 458,650 shares of Houghton common stock and the value of options which allow the sellers to sell Houghton stock, aggregating approximately \$8,900 at minimum prices, to the Company. The sellers have an option to sell stock beginning in April 2001 and ending April 2004 in the amount of \$4,300, at minimum prices increasing each year from \$24 per share to \$30 per share. The sellers have a second option to sell up to 50% of their remaining Houghton stock to the Company at \$32 beginning in 2005. The estimated minimum cost of the shares under this second option is \$4,600. In the event that the exercise of options for cash would cause the Company to violate any of its debt covenants, the options, as amended, permit the Company to issue convertible subordinated notes in lieu of cash.

The Company accounted for the acquisition of Bencyn as a purchase; accordingly assets and liabilities acquired are recorded at their fair value and the excess of purchase price over the fair value of net assets acquired of \$14,137 (including \$4,463 of Bencyn debt) is allocated to goodwill. Results of operations of Bencyn are included in the financial statements from the date of acquisition. Goodwill is being amortized over periods ranging from 7 to 25 years.

3. BUSINESS DISPOSALS

On July 31, 2001, the Company sold Durferri GmbH, a German subsidiary, for aggregate proceeds of approximately \$15.8 million of which \$7.9 million was paid at closing, \$7.0 million is due in 2002 and the remainder is due in equal installments in 2003 and 2004. A gain of \$5,760 was recognized and is included in gain on business disposal.

During 2001, the Company sold its Netherlands warehouse, closed a facility in France and closed domestic facilities in Longview, WA, Chicago, IL and Raleigh, NC. A net loss of \$271 was recognized and is included in gain (loss) on disposal of property, plant and equipment.

The Company closed two facilities in the United Kingdom and recognized losses of \$406 and \$193 in 2001 and 2000, respectively. The losses are included in gain (loss) on disposal of property, plant and equipment.

During 1998, the Company sold its worldwide paper chemicals business to Hercules Incorporated. As part of the agreement of sale, the Company entered into a know-how sharing agreement and a transition product and services agreement, and agreed not to compete against Hercules. These agreements require the Company to provide certain training and support and not to directly compete in the paper chemicals business against Hercules for a period not to exceed five years. In accordance with the terms of the agreements, the Company receives five \$2,000 installments beginning October 1998 through October 2002. The continuing payments are considered income when received.

4. SHORT-TERM DEBT

Short-term debt consists of borrowings under bank lines of credit bearing interest at various rates and foreign bank overdrafts. As of December 31, 2001 and 2000, such borrowings totaled \$7,735 and \$7,365, respectively; and unused lines of credit totaled \$11,249 and \$9,137, respectively. One of the credit lines is collateralized by machinery and equipment with a net book value of approximately \$182 and \$723 as of December 31, 2001 and 2000, respectively; the remaining lines of credit are unsecured.

5. LONG-TERM DEBT

Long-term debt is comprised of the following:

	December 31	
	2001	2000
Revolving credit agreements	\$66,764	\$70,763
Term loans	11,603	13,095
Industrial Revenue Bond	1,300	1,500
Obligations under Capital Leases	883	1,254
Other notes payable	7,041	8,464
Total	87,591	95,076
Less current portion	9,750	12,167
Long-term debt	<u>\$77,841</u>	<u>\$82,909</u>

A. Revolving Credit Agreements – On February 17, 2000, the Company entered into a Revolving Credit Agreement under which the Company could borrow up to \$75,000 in revolving credit (the "Senior Revolver.") of this amount, up to \$50,000 may be borrowed in Eurocurrencies. On December 29, 2000, the lenders under the Senior Revolver consented to the transfer of \$11,737 of borrowings (at December 31, 2001 exchange rates) to their correspondent bank in Germany and issued a payment guarantee relating thereto. The agreements provide for Eurocurrency borrowings which bear interest based upon prevailing LIBOR interest rates (plus applicable margin), while borrowings in US dollars bear interest based upon prevailing prime or LIBOR rates (plus applicable margin). The average interest rate as of December 31, 2001 was 5.14%.

Principal under the Senior Revolver was partially repaid in the amount of \$7.0 million from proceeds of sale of the Dufferin subsidiary (Note 3) and, subsequent to December 31, 2001, from issuance of Senior Subordinated Notes (Note 5F). Pursuant to a Waiver and Amendment to the Senior Revolver dated January 18, 2002, the maturity was extended from March 31, 2002 to January 1, 2004 and the commitment was reduced to \$60 million with further reductions scheduled on December 1, 2002 to \$53 million and on June 30, 2003 to \$49 million.

B. Term Loans – On September 30, 1994, the Company entered into a \$10,000 7-year multicurrency term loan agreement to finance the acquisition of CMT Dasco SA. Under this agreement, as amended, the Company was required to make quarterly principal payments of \$158 plus interest through December 31, 2001, with the final installment due March 31, 2002 in the amount necessary to repay in full the unpaid principal balance. Interest was payable at fixed rates ranging from 6.0% to 6.65%. As of December 31, 2001, the Company had outstanding \$1,768 under the term loan. The loan was repaid on January 18, 2002 from the proceeds of Senior Subordinated Notes (Note 5F).

On June 1, 1993, the Company entered into a \$10,000 term loan agreement. Under such agreement as amended, the Company was required to make quarterly principal payments of \$250 through December 31, 2001, with the final installment due March 31, 2002, in the amount necessary to repay in full the unpaid principal balance. Interest was payable quarterly based upon prevailing LIBOR rates plus 2.75% margin on the outstanding principal balance. As of December 31, 2001, the Company had outstanding \$1,500 of borrowings under the term loan. The loan was repaid on January 18, 2002 from the proceeds of Senior Subordinated Notes (Note 5F).

On January 18, 2002, the Company refinanced two short-term facilities with one of the lenders under the Senior Revolver. Pursuant to a \$6 million Uncommitted Facility Agreement dated February 1996, as amended, the Company had outstanding borrowings of \$3,778 as of December 31, 2001. Borrowings under the facility were due on demand and bear interest based upon prevailing LIBOR rates plus 2.5% margin. Pursuant to a \$5 million Offering Basis Loan Agreement dated June 2000, as amended, the Company had outstanding borrowings of \$4,557 as of December 31, 2001. Borrowings under the facility were due on demand and bear interest based upon the prevailing prime rate plus 1% margin. The refinancing, among other things, converted the then outstanding borrowings under the Uncommitted Facility and the Offering Basis Loan to terms loans, with all principal becoming due on January 1, 2004 and the lender was granted a second priority interest in the collateral provided under the Senior Revolver. As a result of the refinancing, the outstanding borrowings under the Uncommitted Facility and the Offering Basis Loan were classified as long-term debt in the accompanying balance sheet as of December 31, 2001.

During 1994, the Company entered into a \$4,500, 7-year, 7.65% fixed rate term loan agreement to finance the acquisition of a division of EMS, TOGO, Ltd. Under such agreement, the Company was required to make semi-annual principal payments of approximately \$224 beginning May 1, 1994 through November 1, 2000. The remaining unpaid principal balance at December 31, 2000 of \$1,567 was repaid from proceeds under the Uncommitted Facility Agreement in 2001.

C. Industrial Revenue Bond - The Company assumed a variable rate industrial revenue bond in the Bencyn acquisition (Note 2) that was used for financing a manufacturing facility in Lafayette, IN. Interest (1.95% at December 31, 2001) is payable quarterly. Principal was to be repaid in varying amounts beginning October 2001 through October 2012. A bank letter of credit that was issued as collateral for the bond is scheduled to expire October 2002. In connection with the issuance of Senior Subordinated Notes (Note 5F), proceeds were used to prepay the Bond in February 2002.

D. Financial Instruments - The Company enters into interest rate hedge agreements to change the fixed/variable interest rate mix of its debt portfolio to reduce the Company's aggregate risk to movements in interest rates. By using derivative financial instruments to hedge exposures to changes in interest rates, the Company exposes itself to credit risk and market risk. Credit risk is the risk that the counterparty might fail to fulfill its performance obligations under the terms of the derivative contract. Market risk is the risk that the value of a financial instrument might be adversely affected by a change in interest rates.

At December 31, 2001, the Company had the following interest rate collar agreements in effect under which it is reimbursed the excess of a variable rate above a stated maximum rate and is responsible for payment of the excess of a variable rate below a stated minimum rate:

Interest Hedge	Expiration Date	Notional Amount	Maximum Rate	Minimum Rate
US 3 month LIBOR	January 2004	\$16,000	6.00%	5.30%
US 3 month LIBOR	April 2002	7,000	9.25%	6.55%
Euro 3 month LIBOR	April 2002	5,350	7.25%	4.81%

At December 31, 2001, the Company had letters of credit outstanding totaling \$14,628 which support certain debt instruments of subsidiaries and guarantee performance of certain trade activities.

E. Compliance - The loan agreements require the Company to comply with certain covenants such as maintaining minimum financial ratios and tangible net worth. Certain covenants also limit the payment of dividends and repurchase of common stock. The Company was not in compliance with certain financial covenants for the years ended December 31, 2001 and 2000. However, on January 18, 2002 the Company obtained an appropriate waiver for non-compliance and an amendment which modifies the measurement criteria of the financial covenants (Note 5A). In addition, the Company agreed to pledge as collateral to its lenders domestic accounts receivable, inventory,

property, plant and equipment and stock in certain subsidiaries.

F. Issuance of Senior Subordinated Notes – On January 18, 2002, the Company issued \$25 million of Senior Subordinated Notes with detachable warrants to purchase 7.5% of the fully diluted common stock of the Company at a nominal exercise price. The Notes bear interest at 14% per annum, of which 12% is payable monthly and 2% is deferred and payable on the fifth anniversary date. Beginning with the seventh anniversary date, the Notes become payable in two equal annual payments. The Notes are subordinate to collateral pledged under the Company's existing senior debt. The warrant holders have the right to sell the warrants or common stock received from exercise of the warrants to the Company at fair market value beginning on the fifth anniversary date or earlier under certain circumstances. Approximately \$20.9 million from the proceeds of the Notes were used to repay senior debt with the remaining amount used for working capital and transaction costs.

Fixed maturities of the Company's debt (after consideration of the issuance of Senior Subordinated Notes Note 5F) and the Waiver and Amendment to the Senior Revolver (Note 5A) are as follows:

2002	\$ 9,750
2003	5,490
2004	63,744
2005	1,676
2006	6,590
2007 and thereafter	<u>341</u>
Total	<u>\$87,591</u>

6. STOCK PURCHASE PLANS

Pursuant to the Key Employee Stock Purchase Plan adopted by the Company in 1987 and the Outside Director Stock Purchase Plan adopted in 1992, participating eligible employees (as determined by the Board of Directors) of the Company and its subsidiaries and participating outside directors (as determined by the Executive Committee of the Board of Directors) are provided the opportunity to purchase stock of the Company. Each participant may purchase, within ten days of the offer, shares of stock at the fair market value, as determined by the Company's independent appraisal firm, on the date the offer is made.

During 2000, the Company issued 5,000 shares of common treasury stock to participants in the plans at \$17.00 per share. No shares were issued under the plans during 2001. At December 31, 2001, 81,379 shares of common treasury stock are reserved for issuance under the Key Employee Stock Purchase Plan and 81,000 shares are reserved under the Outside Directors Stock Purchase Plan.

At December 31, 2001 and 2000, the Company had promissory notes receivable of \$50 and \$74, respectively related to current and prior issuances. Such notes are repayable up to five years from the date of issuance. Interest charged on the unpaid principal balance at December 31, 2001 was 6% per annum. The notes are collateralized by a pledge of the stock issued. In addition to the Key Employee Stock Purchase Plan and Outside Director Stock Purchase Plan, the Company periodically sells treasury stock to employees and Directors and may finance such purchases with promissory notes.

7. STOCK OPTION PLANS

The Company maintains various stock incentive plans that have been approved by the shareholders to attract, retain and motivate key employees and non-employee directors. The Equity Compensation Plan (the "1993 Plan") provides for the grant of stock options, stock appreciation rights and/or restricted stock to certain key employees and non-employee directors of the Company. A predecessor plan, the 1983 Stock Option Plan (the "1983 Plan") provided for the grant of incentive stock options to certain key employees. The 1983 Plan terminated on December 1, 1992 except for options granted and outstanding, the remainder of which expired during 2000. The Stock Option Plan for Key employees and Directors (the "1990 Plan") provides for the grant of non-qualified stock options and/or stock appreciation rights. The 1990 Plan is currently inactive.

Under the plans, the option period may not exceed 10 years (in the case of incentive stock options, not more than five years for individuals who own more than 10% of the voting power of the Company's stock at the date of grant). The options granted under the plans may be exercised, subject to cumulative annual limits not exceeding 25%, beginning with the date of grant or first anniversary thereafter. Options under the 1993 Plan may be exercised at not less than 100% of the fair market value (as determined by the Company's independent appraisal firm) of the Company's stock at the date the option was granted (in the case of incentive stock options, at not less than 110% of the fair market value for individuals who own more than 10% of the voting power of the Company's stock at the date of grant). Options under the 1990 Plan may be exercised at not less than 50% of the fair market value of the Company's stock at the date the option was granted. Options granted, exercised and expired during 2001 and 2000 are summarized below:

	Shares	Stock Options Price Range Per Share	Weighted Average Exercise Price
Outstanding, December 31, 1999	345,203	\$13.90 - \$ 23.00	\$18.17
Granted	142,900	17.00 - 18.70	17.06
Exercised	16,666	13.90 - 15.00	14.54
Forfeited	55,666	13.90 - 23.00	17.78
Outstanding, December 31, 2000	415,771	\$15.00 - \$23.00	\$17.97
Granted	0	—	—
Exercised	6,666	15.00	15.00
Forfeited	42,694	15.00 - 23.00	18.64
Outstanding, December 31, 2001	<u>366,411</u>	\$15.00 - 23.00	\$17.95

Range of Exercise Prices	Number of Shares		Weighted Average Remaining Contractual Life in Years
	Outstanding	Exercisable	
\$15.00	117,831	104,486	2.0
17.00	119,900	29,975	9.0
18.70	5,000	1,250	4.0
20.00	55,650	55,650	4.0
23.00	<u>68,030</u>	<u>68,030</u>	<u>5.5</u>
	<u>366,411</u>	<u>259,391</u>	<u>5.2</u>

As of December 31, 2001 and 2000, respectively, there were 65,520 and 22,826 shares of common treasury stock available for grants under the 1993 Plan and 900,000 shares available for grants under the 1990 Plan. As of December 31, 2001 and 2000, 259,391 and 233,679 options were exercisable at weighted average exercise prices of \$18.42 and \$18.37, respectively.

The Company accounts for the incentive and nonqualified stock option plans in accordance with Accounting Principles Board Opinion No. 25, under which compensation cost is recognized based on the difference, if any, between the appraised fair value of the Company's stock at the time of option grant and the amount the employee must pay to acquire the stock. The Company's options have been issued at fair market value at the time of grant. Had compensation cost for stock options been determined consistent with Statement of Financial Accounting Standards No. 123, Accounting for Stock-Based Compensation (SFAS 123), the Company's pro forma net income (loss) and earnings (loss) per share for the year ended December 31, 2001 would have been \$2,010 and \$0.46 and for the year ended December 31, 2000 would have been \$(1,066) and \$(0.25). In accordance with the requirements of SFAS 123, this method of accounting has not been applied to options granted prior to the fiscal year beginning January 1, 1995. The resulting pro forma compensation cost may not be representative of that to be expected in future years.

The fair value of each stock option grant is estimated on the date of grant (\$4.69 in 2000) using the Black-Scholes option pricing model with volatility assumed to be zero and the following weighted average assumptions used for grants in 2000: risk-free interest rates of 5.26%; expected dividend yields of 1.35% and expected lives of ten years for the options granted December 15, 1995; June 6, 1997; December 22, 1997; and December 18, 2000.

8. DEFERRED COMPENSATION

Deferred compensation consists primarily of government mandated severance payments in certain foreign countries and retirement benefits for the former owners of certain foreign companies acquired in 1992.

9. CHANGES IN COMPONENTS OF STOCKHOLDERS' EQUITY

A summary of changes in components of stockholders' equity is as follows:

	Accumulated Other Comprehensive Income (loss)	Additional Paid-In Capital	Treasury Stock Amount	Shares
Balance at December 31, 1999	\$(11,140)	\$ 8,292	\$(68,411)	(6,726,077)
Purchase of common stock for treasury			(724)	(38,944)
Stock purchase plans (Note 6)		67	18	5,000
Stock options exercised (Note 7)		183	59	16,666
Acquisition of Bencyn Inc. (Note 2)		9,410	1,597	458,650
Issuance of stock to 401(k) Plan		360	95	26,767
Sale of common stock from treasury		27	7	2,000
Other comprehensive income (loss)	(4,500)	—	—	—
Balance at December 31, 2000	<u>(15,640)</u>	<u>18,339</u>	<u>(67,359)</u>	<u>(6,255,938)</u>
Purchase of common stock for treasury			(330)	(18,565)
Stock options exercised (Note 7)		77	23	6,666
Other comprehensive income (loss)	(2,881)	—	—	—
Balance at December 31, 2001	<u>\$(18,521)</u>	<u>\$18,416</u>	<u>\$(67,666)</u>	<u>(6,267,837)</u>

Accumulated other comprehensive income (loss) consists of accumulated translation adjustments, net gain (loss) on derivative instruments and additional minimum pension liability amounting to \$(18,435), \$148 and \$(234), respectively in 2001 and \$(15,640), \$0 and \$0, respectively in 2000.

10. EMPLOYEE PENSION PLANS

The Company sponsors a defined contribution plan that provides substantially all domestic salaried and domestic hourly employees an opportunity to accumulate funds for their retirement. The Company may make discretionary matching contributions to the plan in the form of Company common stock. During 2000, the Company matched a percentage of participant contributions with common stock valued at \$455. The Company did not provide a matching contribution in 2001.

The Company has defined benefit pension plans covering substantially all US salaried and hourly employees (hereafter "domestic plans") and Canadian and English employees (hereafter "foreign plans"). The domestic plans provide benefits based on an employee's years of service and compensation received for the highest five consecutive years of earnings. The foreign plans provide benefits based on a formula of years of service and a percentage of compensation which varies among the foreign plans. Pension expenses and funded status data is presented as of December 31, 2001 and 2000, respectively, except for the plan assets at fair value for the English plan, which are determined as of September 30, 2001 and 2000, respectively. The Company's funding policy is consistent with funding requirements of applicable government laws and regulations.

Periodic pension expense (income) is as follows:

	Year Ended December 31			
	2001		2000	
	Domestic	Foreign	Domestic	Foreign
Net Pension Expense (Income)				
Actual (return) loss on net assets	\$ (106)	\$ 4,209	\$ 1,314	\$ 4,103
Service cost-benefits earned during period	796	1,003	787	1,034
Interest cost on projected benefit obligation	1,549	2,144	1,483	2,220
Net amortization and deferral	(2,496)	(7,125)	(4,421)	(6,974)
Employee contribution	—	(332)	—	(421)
Gain on curtailment	(42)	—	—	—
	<u>\$ (299)</u>	<u>\$ (101)</u>	<u>\$ (837)</u>	<u>\$ (38)</u>

As a result of the Company's domestic restructuring initiatives, a pension curtailment gain of \$42 was recognized in 2001.

A reconciliation of the funded status of the Company's defined benefit plans to amounts recognized in the consolidated balance sheet is as follows:

	2001		2000	
	Domestic	Foreign	Domestic	Foreign
Fair value of plan assets	\$ 27,247	\$ 35,337	\$ 28,608	\$ 41,533
Projected benefit obligation	(22,069)	(37,674)	(21,502)	(38,573)
Funded status	5,178	(2,337)	7,106	2,960
Unrecognized (gain) loss from past experience	(2,524)	5,179	(4,871)	(920)
Unrecognized transition obligation (asset)	(244)	(160)	(283)	(218)
Unrecognized prior service cost	813	364	971	398
Net amount recognized	<u>\$ 3,223</u>	<u>\$ 3,046</u>	<u>\$ 2,923</u>	<u>\$ 2,220</u>

Amounts Recognized in Consolidated Balance Sheet

Prepaid benefit cost	\$ 3,223	\$ 3,046	\$ 2,923	\$ 2,220
Accrued benefit liability	—	(286)	—	—
Intangible asset	—	52	—	—
Accumulated other comprehensive income	—	234	—	—
	<u>\$ 3,223</u>	<u>\$ 3,046</u>	<u>\$ 2,923</u>	<u>\$ 2,220</u>

Significant actuarial assumptions used to calculate projected benefit obligations and periodic pension expense are as follows:

	2001		2000	
	Domestic	Foreign	Domestic	Foreign
Discount rate	7.50%	6.00% - 6.75%	7.50%	5.75 - 6.75%
Rate of return on assets	9.00%	7.25% - 7.50%	9.00%	7.25 - 7.50%
Salary growth	4.00%	4.00%	4.00%	3.75 - 4.00%

At December 31, 2001, one of the foreign plan's accumulated benefit obligation exceeded the fair value of its assets. The accumulated benefit obligation, projected benefit obligation and fair value of assets amounted to \$2,058, \$2,168 and \$1,874, respectively.

11. INCOME TAXES

The provision for income taxes is summarized as follows:

	Year Ended December 31	
	2001	2000
Current:		
US Federal	\$(1,497)	\$ 196
US State	68	125
Foreign	1,060	1,883
Total current	(369)	2,204
Deferred	1,777	(198)
Total	<u>\$ 1,408</u>	<u>\$ 2,006</u>

Effective Tax Rate

The difference between the worldwide effective tax rate and the US statutory tax rate of 34% results primarily from higher foreign taxes, foreign losses, amortization of goodwill and the effect of state taxes. Brazilian tax loss carryforwards total \$4,745, German tax loss carryforwards total \$8,393, Thai tax loss carryforwards total \$924, and other loss carryforwards of approximately \$4,105.

Deferred income taxes arise due to certain items being includable in the determination of taxable income in periods different than for financial reporting purposes. The tax effect of significant types of temporary differences and carryforwards that give rise to the Company's deferred tax assets and liabilities as of December 31, 2001 and 2000 follows:

	2001	2000
Deferred Tax Assets:		
Fixed assets	\$ -	\$ 456
Accrued expenses	1,316	1,917
Deferred revenue	498	388
Inventory	109	309
Tax loss carryforwards	6,436	7,488
Foreign credit carryforwards	888	1,704
Other	103	(47)
Gross deferred tax assets	9,350	12,215
Valuation allowance	(5,251)	(8,555)
	<u>4,099</u>	<u>3,660</u>
Deferred Tax Liabilities:		
Fixed assets	(769)	-
Prepaid expenses	(2,607)	(1,160)
	<u>(3,376)</u>	<u>(1,160)</u>
Net deferred tax assets	<u>\$ 723</u>	<u>\$ 2,500</u>

At December 31, 2001, the valuation allowance related primarily to foreign tax loss carryforwards. During 2001, the valuation allowance related to foreign tax credit carryovers in the amount of \$1,704 was reversed.

No provision has been made for undistributed earnings of certain subsidiaries (aggregating approximately \$38,707 and \$33,879 at December 31, 2001 and 2000, respectively), which earnings are not expected to be paid to the Company as dividends, since future investment requirements are in excess of these earnings.

12. OTHER ASSETS

Other assets are comprised of the following:

	December 31	
	2001	2000
Excess of cost over net assets of acquired companies	\$30,351	\$33,073
Prepaid pension costs	6,269	5,143
Other assets	2,049	1,698
Deferred tax assets	2,175	1,296
Total	<u>\$40,844</u>	<u>\$41,210</u>

13. FUTURE MINIMUM RENTAL PAYMENTS

The future minimum rental payments required under operating leases that have initial or remaining noncancellable lease terms in excess of one year as of December 31, 2001 are as follows:

2002	\$2,132
2003	1,701
2004	1,124
2005	588
2006	294
2007 and thereafter	—
Total	<u>\$5,839</u>

Rent expense for 2001 and 2000 on operating leases aggregated \$3,303 and \$3,801, respectively.

14. COMMITMENTS AND CONTINGENCIES

The Company has participated in certain payments in connection with a series of Environmental Protection Agency consent orders related to certain hazardous waste cleanup activities under the federal Superfund statute. Cleanup activities at a Superfund site in which the Company is participating are in the final phase, which includes groundwater remediation procedures. Based upon current estimates, the total cost of this phase is not expected to have a material effect upon the Company's consolidated financial statements.

Additionally, there are various claims and pending actions against the Company and its subsidiaries arising out of the normal conduct of its business.

In the opinion of the Company's management, the resolution of the above matters will not have a material adverse impact on the consolidated financial position or the consolidated results of operations.

15. CONCENTRATIONS OF CREDIT RISK

Credit risk represents the accounting loss that would be recognized at the reporting date if counterparties failed completely to perform as contracted. Concentrations of credit risk (whether on or off balance sheet) that arise from financial instruments exist for groups of customers or counterparties when they have similar economic characteristics that would cause their ability to meet contractual obligations to be similarly affected by changes in economic or other conditions. The Company does not have a significant exposure to any individual customer or counterparty. The amounts of credit risk shown, therefore, do not represent expected losses.

The major concentrations of credit risk arise from the Company's receivables in relation to the geographical location of customers, as presented in the following table.

	December 31	
	2001	2000
North America	\$29,849	\$28,142
Europe	28,900	34,564
Asia & Pacific	5,969	5,877
Other	1,242	1,231
	<u>\$65,960</u>	<u>\$69,814</u>

16. FAIR VALUE OF FINANCIAL INSTRUMENTS

The following disclosure of the estimated fair value of financial instruments is made in accordance with SFAS No. 107, Disclosures about Fair Value of Financial Instruments. The estimated fair value amounts have been determined by the Company using available market information and appropriate valuation methodologies.

For short-term debt and long-term debt the rates currently available to the Company for debt with similar terms and remaining maturities are used to estimate the fair value for debt outstanding. At December 31, 2001 the fair value of such debt instruments approximates the carrying value.

The fair value of interest rate hedge agreements (Note 5D) as of December 31, 2001 and 2000 was \$(782) and \$588 respectively. In July 2001, a European interest rate hedge agreement with a notional amount of approximately \$16,550 at December 31, 2001 exchange rates was closed out for a pretax gain of \$480. In August 1999, a domestic interest rate hedge agreement with a notional amount of \$25,000 was closed out for a pretax gain of \$1,413. The gains are being amortized as a reduction of interest expense over the remaining years of the respective agreements. \$407 and \$329 were credited against interest expense in 2001 and 2000, respectively. In accordance with the transition requirements of SFAS 133, the after tax unrealized gain on hedges held and the unamortized portion of the after tax realized gain on closed hedges as of January 1, 2001 are recorded as a cumulative effect adjustment in other comprehensive income (see Note 1).

In addition, the following after tax amounts are included in 2001 other comprehensive income:

	2001
Unrealized depreciation in value of interest hedge agreements held	\$(825)
2001 realized gain on closed interest hedge agreement	288
Amortization into earnings of gains on closed interest hedge agreements	(244)
Net gain (loss) on derivative instruments	<u>\$(781)</u>

17. NON-RECURRING OPERATING EXPENSES

Operating income for 2001 and 2000 includes non-recurring expenses related to the following:

	Year End December 31	
	2001	2000
Streamlining initiatives	\$3,015	\$3,400
Costs of obtaining and developing		
Computer software for internal use	396	1,259
Post-retirement benefit adjustments	0	498
	<u>\$3,411</u>	<u>\$5,157</u>

The streamlining initiatives concerned operational capacity realignments in the US and Europe resulting in the elimination of 83 and 106 employee positions during 2001 and 2000, respectively through primarily involuntary severance programs. \$800 of severance related costs remained unpaid at December 31, 2001. The costs of computer software for internal use relate to an enterprise information systems project in the U.S. This project was accounted for in accordance with AICPA Statement of Position 98-1 whereby certain costs incurred during the application development stage were capitalized while costs incurred during the preliminary project and post-implementation stages and all costs for training and data conversion were charged to expense as incurred. Adjustments to post-retirement benefits pertain to pension and death benefit arrangements.

18. OTHER EVENTS

The Company's 50% owned affiliate in Korea discovered that an embezzlement of funds occurred. The Company has recorded charges of \$359 and \$1,043 in equity in net income of affiliates in the accompanying statements of income for the years 2001 and 2000, respectively to reflect its share of the losses.

REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors and Shareholders of Houghton International Inc.

In our opinion, the accompanying consolidated balance sheets as of December 31, 2001 and 2000 and the related consolidated statements of income and comprehensive income and retained earnings and of cash flows present fairly, in all material respects, the financial position of Houghton International Inc. and subsidiaries (the "Company") at December 31, 2001 and 2000, and the results of their operations and their cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provides a reasonable basis for our opinion.

As discussed in Note 1 of the consolidated financial statements, the Company adopted Statement of Financial Accounting Standards No. 133, Accounting for Derivative Instruments and Hedging Activities, as amended (SFAS 133) on January 1, 2001. In accordance with the transition provisions of SFAS 133, the Company recorded net-of-tax cumulative-effect adjustments aggregating \$929 in other comprehensive income.

PricewaterhouseCoopers LLP

Philadelphia, Pennsylvania
March 21, 2002

DIRECTORS AND OFFICERS

CORPORATE OFFICERS

William F. MacDonald, Jr.
Chief Executive Officer

John D. Brennan
President - Houghton FLUIDCARE

Donald N. Marentette
Vice President - Sales

Thad L. Piatkowski
President - Houghton Metal Finishing

Rosauro V. Holgado
Vice President - Technical Service

Dr. Joseph F. Warchol
Vice President - Technical

Stephen B. Harris
Vice President/Secretary - Treasurer

Richard E. Niwinski
Controller

BOARD OF DIRECTORS

The following listing reflects board composition as of March 31, 2002

John D. Brennan
President - Houghton FLUIDCARE

Charles P. Connolly, Jr.
*Retired President and CEO,
First Union National Bank
Pennsylvania and Delaware*

Theodore G. Kauffman
Private Investor

William F. MacDonald, Jr.
Chairman of the Board and CEO

David W. Moser
*President
Durabla Manufacturing Company*

W. Lloyd Snyder III
*Principal, Snyder and Company
Chairman of the Board,
Huff Paper Company*

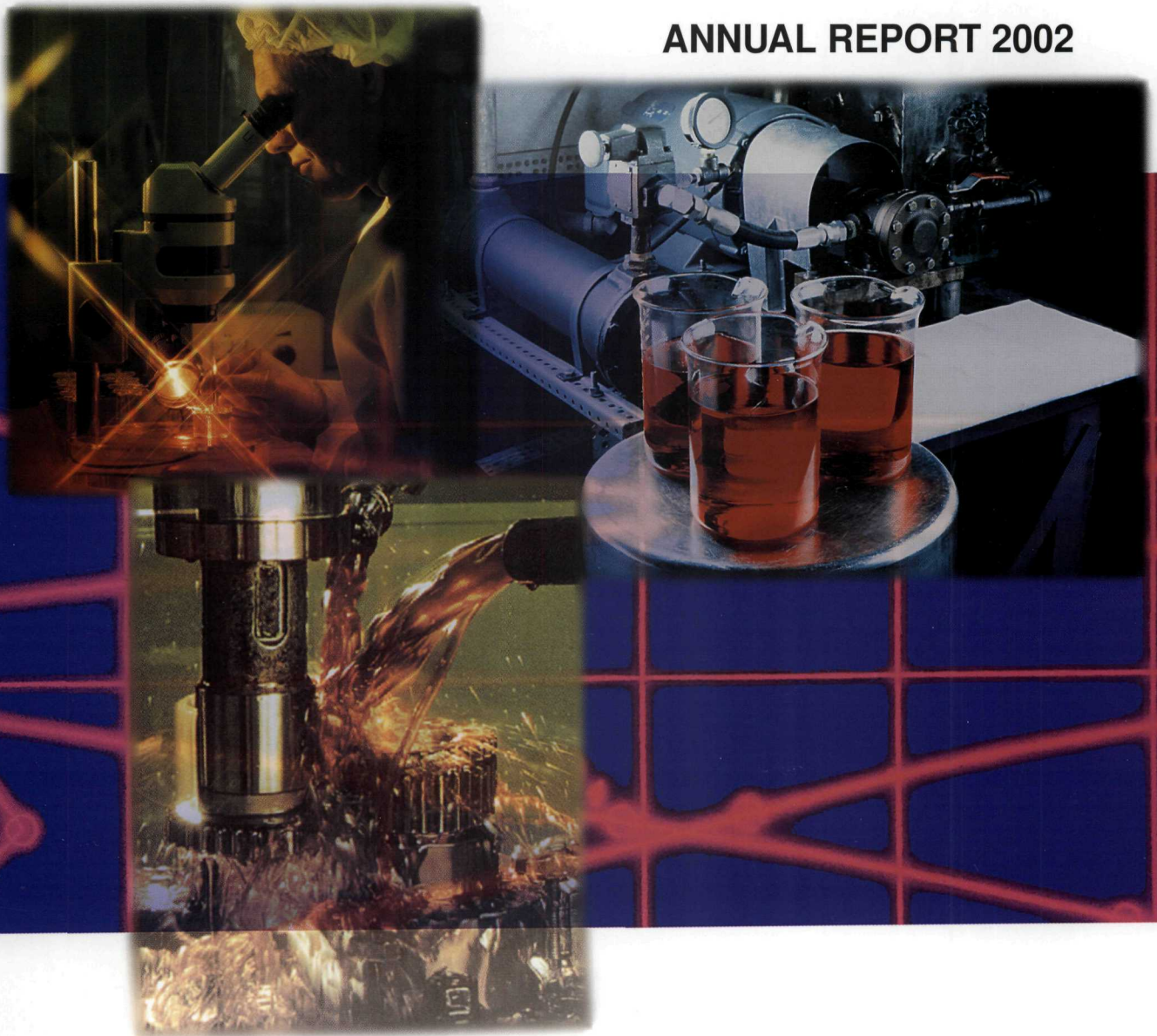


Houghton International Inc.

P.O. Box 930, Valley Forge, PA 19482-0930
(610) 666-4000

HOUGHTON INTERNATIONAL INC.

ANNUAL REPORT 2002



North American Sales Offices and Plants

ALLENTOWN
6681 Snowdrift Road
Allentown, PA 18106

CANADA
Houghton Canada Inc.
100 Symes Road
Toronto M6P 3J5, Ont.

CARROLLTON
421 Garrett Street
Carrollton, GA 30117

CHICAGO
6600 S. Nashville Avenue
Chicago, IL 60638

FORT WORTH
4734 Highway 377 S., Suite 20
Fort Worth, TX 76116

HOUSTON*
1918 Collingsworth Street
Houston, TX 77215

LAFAYETTE
3150 S. Country Road 460 East
Lafayette, IN 47905

SOUTHFIELD
26111 Evergreen Road, Suite 200
Southfield, MI 48076

HOUGHTON FLUIDCARE
Bank One Tower, Suite 710
201 Main Street
Lafayette, IN 47901

HOUGHTON METAL FINISHING
1055 Windward Ridge Parkway
Suite 140
Alpharetta, GA 30005

HOUGHTON OFFSHORE
10375 Richmond Avenue
Suite 1105
Houston, TX 77042

*Warehouse Location

Worldwide

AUSTRALIA
Houghton Australia Pty. Ltd.

BRAZIL
Houghton Brasil LTDA

CHINA
Houghton (China) Co., Ltd.

DENMARK
Houghton Danmark A/S

FRANCE
Houghton S.A.S.

GERMANY
Houghton Deutschland GmbH

HONG KONG
Houghton Oils & Chemicals
(Far East) Co., Ltd.

IRELAND
Houghton Oils & Chemicals
(Ireland) Ltd.

ITALY
Houghton Italia S.p.A.

JAPAN
Houghton Japan Co., Ltd.

KOREA
Korea Houghton Corporation

MEXICO
Especialidades Quimicas
Monterrey S.A.

THE NETHERLANDS
Houghton Benelux BV

NORWAY
Houghton Norge A.S.

POLAND
Houghton Polska SP. Z.O.O.

SINGAPORE
Houghton Singapore

SPAIN
Houghton Iberica S.A.

SWEDEN
Houghton Sverige AB

SWITZERLAND
Houghton (Schweiz) AG

TAIWAN
Houghton Taiwan Co., Ltd.

THAILAND
Thai Houghton 1993 Co., Ltd.

TURKEY
Houghton Kimya Sanayi A.S.

UNITED KINGDOM
Houghton plc

HOUGHTON'S MISSION

To be the World Leader in the management of chemical processes through strategic partnerships with clients and suppliers to maximize shareholder value.

FINANCIAL HIGHLIGHTS

(Dollars in thousands except per share amounts)

	2002	2001	2000
For the year			
Sales	\$311,567	\$304,878	\$315,477
Net income (loss)	(1,718)	2,113	(993)
Per common share			
Earnings	\$ (0.40)	\$ 0.49	\$ (0.23)
At year end			
Total assets	\$224,563	\$221,530	\$230,390
Shareholders' equity	59,923	61,259	62,233

Houghton International Inc. is a global supplier of industrial fluids and chemical management services, primarily for the metalworking industry. Founded in 1865, the Company completed its 137th year in 2002.

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Directors and Officers	IBC

TO OUR SHAREHOLDERS:

The Net Sales of Houghton International increased to \$312 million in 2002, while our Operating Profit improved to \$9.3 million. These summary figures indicate progress for the Company, but not the level of success we want. They also, however, do not do justice to the full range and commitment of our organization over the last year, what we have accomplished and where we arrived by year-end. This is important to assess as we start the new year. Let me elaborate.

We have been navigating change at Houghton for several years now amidst a background of turbulent trends and weak economic activity pretty much around the world. We have undertaken a relatively massive re-engineering program which included closing and selling production facilities as well as one business, reducing our overhead, reducing our cost of materials, increasing our pricing and redirecting our sales and marketing effort. With the closure at year-end of production at our Detroit plant, at our Sydney, Australia plant, and our Raunheim, Germany plant, we have largely completed the restructuring needed for us to proceed into the future with full confidence that we are operating at the level of profitability we require.

I want to note with thanks some of those responsible for outstanding performance in improving our economics. John Schroeder, Director of Manufacturing, and Larry Stewart, Director of Engineering, coordinated the closure of Detroit. Kip Timofeev, Tom McKelvey and Ken Mushen supported their efforts by absorbing the extra production at their respective plants. John Livaich did his part by dramatically improving our Chicago plant's cost-effectiveness. Alf Cook, Managing Director in Australia, and Brett Chalmers, Plant Manager in Melbourne, led the Sydney project. In Europe, Paul Miller, President of Houghton Europe, Ralf Freidrich, Director of Sales, and Ralf Blees, General Manager in Aachen, led a Pan-European team effort for relocating Raunheim's production, a team which included Josep Mestre, Managing Director of Houghton Iberica, Stephan Bringues, Production Manager of Houghton S.A.S. in France, as well as Rita and Paul Brunklaus, Freddie Sauter, and Jens Gartner from Germany. The success of their cooperation has finally moved our German business into solid profitability. This type of cooperation is taking place at all levels and in all areas of the Company and is steadily improving our international effectiveness.

We incurred substantial charges against income in connection with these production closures, including writing off the remaining book value of some assets, severance costs, and the costs of relocating our production capability. These have all been expensed in our 2002 accounts. We will now have the full benefit of the reduction in our cost structure in 2003 and future years.

We also incurred a charge against income resulting from a reduction in the net proceeds received in 2002 from the sale in 2001 of our Dufferit business. The second payment was received as scheduled in November of 2002, but was somewhat less than we had anticipated. There were some cost over-runs on equipment sales made by that business during and after the closing of our sale. The sales value of the transaction, therefore, came into dispute. We chose to negotiate a settlement and take a charge for the reduction in the amount due to us rather than prolong this matter with arbitration and litigation.

In our marketplace, we more than held our own led by Hank Limper and his very successful promotion of our metal cutting technology throughout North America and even to the Far East. Joe Wintsch was elected Vice President-Sales late in the year and has already installed an energetic program for bringing in new business with tight accountability from his sales team. We also made progress at last in our die cast release program led by Lester Eng and Don Wallace in Canada supported by Tracy Beatty and Jeff Nowasad. In the Far East, C.Y. Lai spearheaded our growth in China and Tony Lee continued to expand our business in Thailand. In North America, our sales to the automotive industry held up well, but general manufacturing industry continued a weak recovery. In Europe, we experienced a continued slow manufacturing environment, particularly in the United Kingdom. Here also our sales and marketing effort paid off with new business, but that was largely offset by plant closures and slow production in our customer base. We continued to meet these challenging conditions through cost reductions and aggressive market promotion.

Houghton FLUIDCARE consolidated its rapid growth of the last several years with renewed emphasis upon contract accounting, information systems and collection of overdue receivables. David Hays joined as Controller in March and

Dan Fisher took over the general management as Vice President late in the year. John Brennan moved to a new role as Business Consultant. Don Benedyk retired at year-end, but is still actively assisting our promotions and site management as a consultant. While the growth of Houghton FLUIDCARE has not been without its challenges, we have overcome them and in the process transformed our Company into a broader service oriented enterprise with a much higher profile in industry. We are growing in this field on a profitable basis and have spread our capability throughout the world. We are fulfilling our Mission and have ample opportunity for further growth.

Our financial performance improved considerably last year. We started to pay down bank debt in the second half and have continued to do so early in 2003. Bill Streich joined us as Vice President-Finance in August and Jay Rohr as Controller in July, while Dick Niwinski moved over to be International Accounting Manager. Mark Bishop established a stronger and unified financial team in Europe with new financial controllers, Mauro Mortillaro in Italy, Bruce Miller in Germany and Hilary Blackwell in the U.K. In total, this financial team has installed greater discipline into our financial processes and reporting.

Our banks and John Hancock are comfortable with our performance and reporting. We are currently well along in arranging new financing from a new group of bankers. We have a tight budget for the year which shows a further increase in sales and profitability without the substantial restructuring charges we have been incurring for the last several years. We will, in fact, finally have a full year's effect from all the profit improvements we have made, including a reduction in the level of our interest expense. We are off to a decent start in 2003 with the prospects for realizing our targets very solid. We are not planning on much of an economic upturn until 2004 and are planning our sales promotions and general expenditures accordingly.

Hempstead & Co. has again analyzed our Company's operations and has concluded that the value of a share of Houghton International common stock as of December 31, 2002 is \$15.00. This valuation takes into account the dilution from the issuance of warrants with the placement of our subordinated debt issue early in 2002. We are still

talking to some prospective investors in our Company and will be addressing the question of restoring a dividend in the course of completing our new bank financing. That will depend upon our continuing to produce the level of results we are now realizing.

That point takes me full circle to where I started this report. We have come through a difficult economic period and have redirected and restructured our Company while growing and investing. We have taken more extensive measures faster than we might otherwise have done without pressure to improve our performance. We have emerged from this period bigger, stronger and tougher than ever before. We have great capability and more ambition than ever before and more opportunities upon which to exercise our capability and ambition. The Houghton Team is working well together and ready to handle these opportunities. For myself, I can relate that I am very proud of all that our organization has accomplished over the last several years, relieved that all the heavy lifting is now behind us and happy that we can now focus on the far more pleasant work of optimizing the effectiveness of our sound business and capable organization. We are looking forward with confidence in our future. We believe that the best years for Houghton are ahead of us.

Sincerely,



William F. MacDonald, Jr.
Chairman of the Board

CONSOLIDATED BALANCE SHEETS

December 31, 2002 and 2001

(Dollars in thousands except share and per share amounts)

ASSETS	2002	2001
CURRENT ASSETS:		
Cash and cash equivalents	\$ 11,388	\$ 8,027
Trade receivables (less allowance for doubtful accounts - 2002, \$3,431; 2001, \$3,664)	67,005	65,960
Inventories	34,216	30,894
Other current assets	8,293	15,037
Deferred income taxes	1,349	1,924
Assets held for sale	918	976
Total current assets	123,169	122,818
INVESTMENTS AND ADVANCES:		
Equity affiliates	7,421	6,581
Other	733	651
Total investments and advances	8,154	7,232
PROPERTY, PLANT AND EQUIPMENT:		
Land and buildings	46,935	44,877
Machinery and equipment	82,537	78,835
Leasehold improvements	31	385
Construction in progress	779	874
Total	130,282	124,971
Accumulated depreciation and amortization	(80,086)	(74,335)
Total property, plant and equipment, net	50,196	50,636
OTHER ASSETS:		
Goodwill	32,043	30,351
Prepaid pension costs	2,994	6,269
Deferred income taxes	4,874	2,175
Other assets	3,133	2,049
Total other assets	43,044	40,844
TOTAL	\$224,563	\$221,530

See notes to consolidated financial statements.

LIABILITIES AND STOCKHOLDERS' EQUITY	2002	2001
CURRENT LIABILITIES:		
Short-term debt	\$ 6,458	\$ 7,735
Current portion of long-term debt	2,086	9,750
Accounts payable	41,491	40,629
Accrued compensation and other	15,907	13,812
Income taxes payable	—	1,414
Deferred income taxes	1,187	2,607
Total current liabilities	67,129	75,947
LONG-TERM DEBT	84,250	77,841
OTHER LIABILITIES:		
Deferred compensation	4,257	3,854
Accrued pension	5,840	—
Deferred income taxes	1,386	769
Minority interests and other	1,778	1,860
Total other liabilities	13,261	6,483
COMMITMENTS AND CONTINGENCIES (Note 12)		
STOCKHOLDERS' EQUITY:		
Capital stock - par value, \$.50 a share:		
Noncumulative 6% voting preferred, call price \$.53 a share - authorized 500,000 shares	—	—
Common stock - par value, \$.50 a share: authorized 25,000,000; issued 10,613,600 shares	5,307	5,307
Additional paid-in capital	22,862	18,366
Retained earnings	122,055	123,773
Accumulated other comprehensive loss	(19,472)	(18,521)
Total	130,752	128,925
Treasury stock, at cost (2002: 6,395,926 shares; 2001: 6,267,837 shares)	(70,829)	(67,666)
Total stockholders' equity	59,923	61,259
TOTAL	\$224,563	\$221,530

CONSOLIDATED STATEMENTS OF OPERATIONS

(Dollars in thousands, except per share amounts)

	Year ended December 31		
	2002	2001	2000
Net sales	\$311,567	\$304,878	\$315,477
Cost of goods sold	219,298	215,990	215,749
GROSS PROFIT	92,269	88,888	99,728
Selling, general and administrative expenses	80,198	80,115	85,337
Restructuring and other operating expenses	2,769	3,411	5,157
OPERATING INCOME	9,302	5,362	9,234
OTHER INCOME (EXPENSE), NET:			
Interest expense, net	(8,376)	(7,182)	(7,925)
Gain (loss) on business disposal	(1,419)	5,760	—
Other, net	(593)	(419)	(296)
Total other expense	(10,388)	(1,841)	(8,221)
INCOME (LOSS) BEFORE INCOME TAXES	(1,086)	3,521	1,013
Provision for income taxes	632	1,408	2,006
NET INCOME (LOSS)	\$ (1,718)	\$ 2,113	\$ (993)
BASIC EARNINGS (LOSS) PER SHARE OF COMMON STOCK	\$ (0.40)	\$ 0.49	\$ (0.23)
DILUTED EARNINGS (LOSS) PER SHARE OF COMMON STOCK	\$ (0.40)	\$ 0.48	\$ (0.23)

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS

(Dollars in thousands)

Year ended December 31

	2002	2001	2000
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net income (loss)	\$(1,718)	\$2,113	\$(993)
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	7,349	9,768	9,134
Loss (gain) on disposal of property, plant and equipment	(335)	704	(201)
Loss (gain) on business disposal	1,419	(5,760)	—
Asset impairments	1,174	—	—
Equity in net income of affiliates	(947)	(422)	61
Deferred compensation	173	796	(866)
Non-cash interest and amortization on senior subordinated notes	1,047	—	—
Deferred income taxes	(528)	1,638	(165)
Changes in current assets and liabilities, net of effects of acquisitions:			
Accounts receivable	3,474	3,912	(5,558)
Inventories	(829)	(1,432)	(3,951)
Prepaid expenses and other assets	(1,582)	(9,577)	1,556
Accounts payable	(4,462)	(1,592)	7,517
Accrued expenses and other liabilities	3,209	3,243	(794)
Net cash provided by operating activities	7,444	3,391	5,740
CASH FLOWS FROM INVESTING ACTIVITIES:			
Purchases of property, plant and equipment	(4,549)	(4,741)	(8,306)
Proceeds from disposal of property, plant and equipment	1,350	144	1,176
Proceeds from business disposal	7,102	7,950	—
Payments for acquisitions (net of cash acquired)	—	—	(2,524)
Net cash provided by (used in) investing activities	3,903	3,353	(9,654)
CASH FLOWS FROM FINANCING ACTIVITIES:			
Net proceeds (payments) of short-term debt - banks	(2,148)	370	(388)
Net proceeds from (purchases of) treasury stock and stock options	(663)	(230)	92
Net proceeds (payments) of long-term debt	(3,018)	(5,600)	5,341
Net cash provided by (used in) financing activities	(5,829)	(5,460)	5,045
EFFECT OF EXCHANGE RATE CHANGES ON CASH	(2,157)	(327)	(214)
NET INCREASE IN CASH AND CASH EQUIVALENTS	3,361	957	917
CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR	8,027	7,070	6,153
CASH AND CASH EQUIVALENTS AT END OF YEAR	\$11,388	\$8,027	\$7,070

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY

(Dollars in thousands, except per share amounts)

	Common Stock	Additional Paid-In-Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Treasury Stock Amount	Stock Shares
Balance at January 1, 2000	\$5,307	\$ 8,069	\$122,653	\$(11,140)	\$(68,411)	6,726,077
Net loss	—	—	(993)	—	—	—
Stock purchase plans	—	67	—	—	18	(5,000)
Stock options exercised	—	183	—	—	59	(16,666)
Acquisition of Bencyn Inc.	—	9,410	—	—	1,597	(458,650)
Issuance of stock to 401(k) plan	—	360	—	—	95	(26,767)
Common share purchases	—	—	—	—	(724)	38,944
Common share sales	—	27	—	—	—	—
Proceeds from stock purchase plan	—	149	—	—	7	(2,000)
Other comprehensive loss	—	—	—	(4,500)	—	—
Balance at December 31, 2000	\$5,307	\$18,265	\$121,660	\$(15,640)	\$(67,359)	6,255,938
Net income	—	—	2,113	—	—	—
Common share purchases	—	—	—	—	(330)	18,565
Stock options exercised	—	77	—	—	23	(6,666)
Proceeds from stock purchase plan	—	24	—	—	—	—
Other comprehensive loss	—	—	—	(2,881)	—	—
Balance at December 31, 2001	\$5,307	\$18,366	\$123,773	\$(18,521)	\$(67,666)	6,267,837
Net loss	—	—	(1,718)	—	—	—
Common share purchases	—	—	—	—	(163)	9,499
Issuance of convertible subordinated notes	—	—	—	—	(3,000)	118,590
Issuance of detachable warrants	—	4,467	—	—	—	—
Proceeds from stock purchase plan	—	29	—	—	—	—
Other comprehensive loss	—	—	—	(951)	—	—
Balance at December 31, 2002	<u>\$5,307</u>	<u>\$22,862</u>	<u>\$122,055</u>	<u>\$(19,472)</u>	<u>\$(70,829)</u>	<u>6,395,926</u>

CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS

(Dollars in thousands)

	Year ended December 31		
	2002	2001	2000
Net income (loss)	\$(1,718)	\$2,113	\$ (993)
Other comprehensive income (loss):			
Foreign currency translation adjustment	5,403	(2,795)	(4,500)
Minimum pension liability adjustment (net of taxes of \$(2,770) in 2002 and \$0 in 2001)	(6,079)	(234)	—
Cumulative effect of adopting SFAS No. 133 (net of taxes of \$620)	—	929	—
Net changes in derivatives designated as cash flow hedges (net of taxes of \$(184) in 2002 and \$98 in 2001)	(275)	148	—
Total other comprehensive loss	(951)	(2,881)	(4,500)
Comprehensive loss	<u>\$(2,669)</u>	<u>\$ (768)</u>	<u>\$ (5,493)</u>

See notes to consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(Dollars in thousands, except share and per share amounts)

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. Business – Houghton International Inc. is a global supplier of industrial fluids and chemical management services, primarily for the metalworking industry. The principal markets for Houghton International Inc.'s products and services are the Americas, Europe and Asia.

B. Principles of Consolidation and Basis of Presentation – The consolidated financial statements include Houghton International Inc. and all majority owned and controlled subsidiaries (the Company) and, on an equity basis, 50% owned affiliates. All significant intercompany transactions and balances have been eliminated.

Total assets, liabilities and net income of equity affiliates amounted to \$39,296, \$22,742, and \$1,894, respectively, in 2002 and \$37,550, \$24,624 and \$845, respectively in 2001.

Total assets, liabilities, and net income (loss) of consolidated foreign subsidiaries amounted to \$146,733, \$92,761, and \$(1,024), respectively, in 2002 and \$137,472, \$86,079, and \$5,029, respectively, in 2001.

C. Revenue Recognition - Sales are generally recognized when products are shipped at which time title and risk of loss passes to the customer.

D. Shipping and Handling - The Company reports shipping and handling revenues as sales and the related cost as cost of goods sold.

E. Inventories – A portion of domestic inventories are recorded using the last-in, first-out (LIFO) cost method. Such LIFO amounts represent 62% and 58% of the total 2002 and 2001 domestic inventories prior to the LIFO adjustment, respectively. If the first-in, first-out (FIFO) method of inventory valuation had been used for all inventories by the Company, inventories would have been \$8,245 and \$8,477 higher at December 31, 2002 and 2001, respectively. Other inventories are carried at the lower of cost or market, cost being determined by FIFO method. The Company's total inventory, net of LIFO reserves, consists of the following:

	December 31	
	2002	2001
Raw materials	\$11,560	\$11,361
Work in process	147	196
Finished goods	22,509	19,337
Total	<u>\$34,216</u>	<u>\$30,894</u>

F. Depreciation and Amortization – Depreciation and amortization are provided generally on a straight-line basis over the estimated useful lives of the related assets.

G. Goodwill – Effective January 1, 2002, the Company adopted Statement of Financial Accounting Standards (SFAS) No. 142, "Goodwill and Other Intangible Assets." SFAS No. 142 requires goodwill to be tested for impairment on an annual basis and between annual tests in certain circumstances, and written down when impaired, rather than being amortized as previous accounting standards required. In accordance with SFAS No. 142, the Company ceased amortizing goodwill totaling \$30,351 as of January 1, 2002. Based upon impairment tests performed at the transition date of January 1, 2002 and the testing date of November 30, 2002, there was no impairment of goodwill in 2002. Prior to adoption of SFAS No. 142, goodwill was amortized on a straight-line basis over periods of 5 to 25 years. Amortization expense on goodwill was \$2,110 and \$1,976 in 2001 and 2000, respectively.

- H. Earnings Per Share of Common Stock – Basic and diluted earnings per share are computed using the weighted average number of shares of common stock outstanding. Common equivalent shares from convertible securities are included in the diluted computation when their effect is dilutive.
- I. Cash and Cash Equivalents – Cash and cash equivalents represent cash in banks and short-term investments having an original maturity of less than three months.
- J. Foreign Currency Translation – The accounts of non-U.S. subsidiaries and affiliates are measured using local currency as the functional currency. For those operations, assets and liabilities are translated into U.S. dollars at year end exchange rates. Income and expense amounts are translated at the average exchange rates prevailing during the year. Net gains or losses resulting from such translation are accumulated in other comprehensive income (loss) within stockholders' equity. Gains and losses from foreign currency transactions are included in other income. For the years ended December 31, 2002, 2001 and 2000, such net gains (losses) were \$392, \$(101) and \$(107), respectively.
- K. Income Taxes – The Company accounts for income taxes under the asset and liability method in accordance with Statement of SFAS No. 109, "Accounting for Income Taxes."
- L. Environmental Expenditures – Environmental expenditures that relate to current or future revenues are expensed or capitalized as appropriate. Expenditures that relate to an existing condition caused by past operations, and do not contribute to current or future revenue generation, are expensed. Liabilities are recorded when environmental assessments and/or clean-ups are probable, and the costs can be reasonably estimated. Generally, the timing of these accruals coincides with the commitment to a formal plan of action.
- M. Long-Lived Assets and Assets Held for Sale – Effective January 1, 2002, the Company adopted SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets." SFAS No. 144 requires long-lived assets be tested for recoverability whenever events or changes in circumstances indicate that carrying values may not be recoverable. An impairment loss shall be recognized if the carrying amount of a long-lived asset is not recoverable and exceeds the fair value of the asset. The standard also establishes criteria to determine when long-lived assets are to be classified as "held for sale."
- The Company has classified certain land, buildings and equipment as "held for sale" in the accompanying Consolidated Balance Sheets. Since the fair values of these assets are greater than the respective carrying amounts, no impairment loss has been recognized on these assets during 2002.
- N. Estimates – The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results may differ from those estimates and assumptions.
- O. Derivatives and Hedging Activities – On January 1, 2001, the Company adopted SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities," as amended by SFAS No. 138 "Accounting for Certain Derivative Instruments and Certain Hedging Activities." Upon adopting SFAS No. 133, the Company recorded a net-of-tax cumulative-effect adjustment of \$929 related to previously designated cash flow hedges in other comprehensive income.

All derivatives are recognized on the accompanying Consolidated Balance Sheets at their fair value. Currently, the Company enters into derivative contracts to hedge exposures of interest rates (cash flow hedges). The changes in fair value of a derivative that is designated and qualifies as a cash flow hedge, to the extent that the hedge is effective, is recorded in other comprehensive income. Any hedge ineffectiveness (which represents the amount by which the changes in the fair value of the derivative exceed the variability in the cash flows of the forecasted transaction) is recorded in current-period earnings. When it is determined that a derivative is no longer effective as a hedge, the Company discontinues hedge accounting prospectively.

P. Stock-Based Compensation: The Company accounts for incentive and nonqualified stock option plans in accordance with Accounting Principles Board Opinion No. 25, under which compensation cost is recognized based on the difference, if any, between the appraised fair value of the Company's stock at the time of option grant and the amount the employee must pay to acquire the stock. The Company's options have been issued at fair market value at the time of grant.

Q. New Accounting Standards: In April 2002, the Financial Accounting Standards Board (FASB) issued SFAS No. 145, "Rescission of FASB Statements No. 4, 44, and 64, Amendment of FASB Statement No. 13, and Technical Corrections." Under SFAS No. 145, gains and losses on extinguishments of debt are to be classified as income or loss from continuing operations rather than extraordinary items. The Company is required to adopt SFAS No. 145 in the first quarter of fiscal 2003 and does not expect the adoption of this statement to have a material impact on its financial condition or results of operations.

In July 2002, the FASB issued SFAS No. 146, "Accounting for Costs Associated with Exit or Disposal Activities." The statement requires companies to recognize costs associated with exit or disposal activities when they are incurred rather than at the date of a commitment to an exit or disposal plan. Costs covered by the standard include lease termination costs and certain employee severance costs that are associated with a restructuring, plant closing, or other exit or disposal activity. This statement is effective for exit or disposal activities initiated after December 31, 2002. SFAS No. 146 may affect the timing of the Company's recognition of future exit or disposal costs, if any.

In 2003, the FASB issued SFAS No. 148, "Accounting for Stock-Based Compensation - Transition and Disclosure." The standard amends SFAS No. 123, "Accounting for Stock-Based Compensation," to provide alternative methods of transition for a voluntary change to the fair value based method of accounting for stock-based employee compensation. The Company has elected not to adopt SFAS No. 123 for options granted prior to 2003, but is assessing prospective adoption for future option grants.

R. Reclassifications - Certain reclassifications have been made to conform prior years' balances to current year presentations.

2. EARNINGS (LOSS) PER SHARE

The following table sets forth the computation of basic and diluted earnings (loss) per share.

	Year ended December 31		
	2002	2001	2000
Numerator:			
Numerator for basic earnings per share - net income (loss)	<u>\$(1,718)</u>	<u>\$2,113</u>	<u>\$(993)</u>
Denominator:			
Denominator for basic earnings per share - weighted average shares	4,255,692	4,352,564	4,320,990
Effect of dilutive employee stock options	<u>—</u>	<u>13,862</u>	<u>—</u>
Denominator for diluted earnings per share adjusted weighted average shares	<u>4,255,692</u>	<u>4,366,426</u>	<u>4,320,990</u>
Basic earnings (loss) per share	<u>\$(0.40)</u>	<u>\$ 0.49</u>	<u>\$(0.23)</u>
Diluted earnings (loss) per share	<u>\$(0.40)</u>	<u>\$ 0.48</u>	<u>\$(0.23)</u>

The following securities and their equivalent shares of common stock were not included in the computation of diluted earnings per share because they were anti-dilutive for the periods presented:

	Year ended December 31		
	2002	2001	2000
Employee stock options	361,411	366,411	415,771
Warrants, detachable from senior subordinated notes	382,815	—	—
Convertible subordinated notes	118,590	—	—
Total	<u>862,816</u>	<u>366,411</u>	<u>415,771</u>

3. BUSINESS DISPOSALS

On July 31, 2001, the Company sold Durferri GmbH, a German subsidiary, for approximately \$16,100 of which \$8,100 was paid at closing, \$7,200 was due in 2002 and the remainder was due in equal installments of \$400 in 2003 and 2004. A gain of \$5,760 was recognized in 2001 and is included in gain on business disposal in the accompanying Statements of Operations. The installments due in 2002, 2003 and 2004 were contingent upon Durferri GmbH achieving certain operational standards subsequent to the sale. During 2002, it became apparent that Durferri GmbH would not achieve such operating standards. Accordingly, the Company reached an agreement with the buyer whereby the 2002 installment was reduced by \$1,000 and the 2003 installment of \$400 was eliminated. The remaining \$400 installment due in 2004 remains in tact and is collateralized by a stand-by letter of credit. As a result, in 2002, the Company recorded a loss on business disposal of \$1,419.

During 1998, the Company sold its worldwide paper chemicals business to Hercules Incorporated. As part of the agreement of sale, the Company entered into a know-how sharing agreement and a transition product and services agreement, and agreed not to compete against Hercules. These agreements required the Company to provide certain training and support and not to directly compete in the paper chemicals business against Hercules for a period not to exceed five years. In accordance with the terms of the agreements, the Company received five annual installments of \$2,000 beginning October 1998 through October 2002. These payments were recognized as income over the annual period of April to March. As of December 31, 2002, \$500 of such income remained deferred to be recognized during the first quarter of 2003.

4. SHORT-TERM DEBT

Short-term debt consists of borrowings under bank lines of credit bearing interest at various rates. As of December 31, 2002 and 2001, such borrowings totaled \$6,458 and \$7,735, respectively; and unused lines of credit totaled \$8,537 and \$11,249, respectively. One of the credit lines is collateralized by machinery and equipment with a net book value of approximately \$215 and \$182 as of December 31, 2002 and 2001, respectively. The remaining lines of credit are unsecured.

5. LONG-TERM DEBT

Long-term debt is comprised of the following:

	December 31	
	2002	2001
Revolving credit agreement	\$48,148	\$66,764
Senior subordinated notes, net of discount	21,580	—
Term loans	8,823	11,603
Convertible subordinated notes	2,500	—
Industrial revenue bond	—	1,300
Obligations under capital leases	575	883
Other notes payable	4,710	7,041
Total	86,336	87,591
Current portion	(2,086)	(9,750)
Long-term debt	<u>\$84,250</u>	<u>\$77,841</u>

Fixed maturities of the Company's debt are as follows:

2003	\$ 2,086
2004	58,454
2005	909
2006	404
2007	243
2008 and thereafter	<u>24,240</u>
Total	<u>\$86,336</u>

The Company is currently in negotiations to refinance the existing Revolving Credit Agreement and Term Loans (Senior Debt), which is due January 1, 2004. In anticipation of these negotiations, the Company has paid down over \$10 million in Senior Debt since the second quarter of 2002. Cash generated from asset sales, proceeds from the Durferit sale and operating cash flow was utilized for these payments. In addition, there have been no borrowings under the Revolving Credit Agreement since the second quarter of 2002 and the Company's cash flow projections for 2003 show sufficient cash flow and no borrowing requirements during the year 2003. Although the outcome of negotiations is uncertain, management is confident that it will successfully refinance the Senior Debt before January 1, 2004.

The Company's management believes that the combination of cash on hand, cash generated by operations and, if necessary, additional borrowing under the current credit agreement will be sufficient to satisfy the Company's operating cash requirements in the short-term and long-term.

Interest paid was \$9,226, \$7,085 and \$8,133 in the years ended December 31, 2002, 2001 and 2000, respectively.

A. Revolving Credit Agreement – On February 17, 2000, the Company entered into a Revolving Credit Agreement under which the Company could borrow up to \$75,000 in revolving credit (the Senior Revolver) of this amount, up to \$50,000 may be borrowed in euro currency. On December 29, 2000, the lenders under the Senior Revolver consented to the transfer of \$11,737 of borrowings (at December 31, 2001 exchange rates) to their correspondent bank in Germany and issued a payment guarantee relating thereto. The euro currency borrowings bear interest based upon prevailing LIBOR rates (plus applicable margin), while borrowings in U.S. dollars bear interest based upon prevailing prime or LIBOR rates (plus applicable margin.) The average interest rate as of December 31, 2002 was 5.09%.

Pursuant to a Waiver and Amendment to the Senior Revolver dated January 18, 2002, the maturity was extended from March 31, 2002 to January 1, 2004 and the commitment was reduced to \$60,000 with further reductions scheduled on December 1, 2002 to \$53,000 and on June 30, 2003 to \$49,000. The amount utilized under the senior credit agreement was reduced to \$48,148 as of December 31, 2002.

The loan agreements require the Company to comply with certain covenants such as maintaining minimum financial ratios and tangible net worth. Certain covenants also limit the payment of dividends and repurchase of common stock. The Company was not in compliance with certain financial covenants for the year ended December 31, 2001. However, on January 18, 2002, the Company obtained a waiver for non-compliance and an amendment which modifies the measurement criteria of the financial covenants. In addition, the Company agreed to pledge as collateral to its lenders domestic accounts receivable, inventory, property, plant and equipment and stock in certain subsidiaries. As of December 31, 2002, the Company is in full compliance with all financial covenants. Further, through Amendment 5 dated March 18, 2003, the Company reset the financial covenants for 2003, which are less restrictive than the prior covenants.

B. Senior Subordinated Notes – On January 18, 2002, the Company issued \$25 million of Senior Subordinated Notes (the Notes) with detachable warrants to purchase 7.5% of the fully diluted common stock of the Company at a nominal exercise price. The Notes bear interest at 14% per

annum, of which 12% is payable monthly and 2% is deferred and accreted to the principal balance until the fifth anniversary date. After the fifth anniversary date, interest is payable at 14% through maturity. The deferred interest accreted to the Notes at December 31, 2002 was \$479. Upon issuance, the Notes were recorded net of a discount of \$4,467 which represents the fair value of the warrants on January 18, 2002. The discount is being amortized into expense over the remaining term of the Notes. As of December 31, 2002, the unamortized discount was \$3,899. Beginning with the seventh anniversary date, the Notes become payable in two equal annual payments. The Notes are subordinate to collateral pledged under the Company's existing Senior Debt. The warrant holders have the right to sell the warrants or common stock received from exercise of the warrants to the Company at fair market value beginning on the fifth anniversary date or earlier under certain circumstances. Approximately \$20,900 from the proceeds of the Notes were used to repay Senior Debt, term loans, and an industrial revenue bond, with the remaining amount used for working capital and transaction costs. The Notes carry financial covenant requirements similar to the Revolving Credit Agreement. As of December 31, 2002, the Company is in full compliance with the financial covenant requirements of the Notes. Additionally, through Amendment 2 dated March 18, 2003, the Company reset the financial covenants, which are less restrictive than the prior covenants.

C. Term Loans – On September 30, 1994, the Company entered into a \$10,000 seven year multicurrency term loan agreement to finance the acquisition of CMT Dasco SA. Interest was payable at fixed rates ranging from 6.0% to 6.65%. As of December 31, 2001, the Company had outstanding \$1,768 under the term loan. The loan was repaid on January 18, 2002 from the proceeds of Senior Subordinated Notes.

On June 1, 1993, the Company entered into a \$10,000 term loan agreement. Interest was based upon prevailing LIBOR rates plus 2.75% margin on the outstanding principal balance. As of December 31, 2001, the Company had outstanding \$1,500 of borrowings under the term loan. The loan was repaid on January 18, 2002 from the proceeds of Senior Subordinated Notes.

Pursuant to a \$6 million Uncommitted Facility Agreement dated February 1996, as amended, the Company had outstanding borrowings of \$3,778 as of December 31, 2001. Borrowings under the facility were due on demand and bear interest based upon prevailing LIBOR rates plus 2.5% margin. Pursuant to a \$5,000 Offering Basis Loan Agreement dated June 2000, as amended, the Company had outstanding borrowings of \$4,557 as of December 31, 2001. Borrowings under the facility were due on demand and bear interest based upon the prevailing prime rate plus 1% margin. On January 18, 2002, the Company refinanced these two facilities with one of the lenders under the Senior Revolver. The refinancing, among other things, converted the then outstanding borrowings under the Uncommitted Facility and the Offering Basis Loan to terms loans, with all principal becoming due on January 1, 2004 and the lender was granted a second priority interest in the collateral provided under the Senior Revolver. As a result of the refinancing, the outstanding borrowings under the Uncommitted Facility and the Offering Basis Loan were classified as long-term debt in the accompanying Consolidated Balance Sheet as of December 31, 2001.

D. Convertible Subordinated Notes - In January 2000, the Company acquired Bencyn, Inc. and an associated real estate holding company for approximately \$13,809. The purchase consideration included \$2,400 in cash, 458,650 shares of the Company's common stock and the value of put options on the Company's common stock. The put options, upon exercise by the sellers, require the Company to repurchase shares of stock from the sellers at minimum prices. Under these options, the Company could be required to purchase up to \$2,000 of stock per year from May 15, 2001 through May 15, 2004, not to exceed \$4,300 in the aggregate during the period. The purchases are to be made at minimum prices equal to the greater of the Company's annual common stock valuation or prices increasing each year from \$24.00 per share to \$30.00 per share. As of December 31, 2002, \$3,000 of such puts have been exercised, of which the Company paid \$500 in cash and issued notes for the remaining \$2,500. Further, on May 15, 2005, the Company may be required to purchase up to 50% of the then remaining shares held by the sellers for a price equal to the greater of the Company's common stock valuation or \$32.00 per share. The Company's estimated minimum potential purchase obligation on the May 15, 2005 put is \$4,700.

In the event that the exercise of the put options for cash would cause the Company to violate any of its debt covenants, the options allow the Company to issue convertible subordinated notes in lieu of cash. The convertible subordinated notes allow the holder to convert the notes back into such number of shares of common stock of the Company as were originally surrendered upon exercise of the put option. The notes bear interest at either 12% or 9% depending on the seller involved or the date of issuance. If not converted into common stock, the notes become due and payable on the earlier of April 20, 2008 or April 30, 2010, subject to such payment not violating senior credit agreements.

E. Industrial Revenue Bond - The Company assumed a variable rate industrial revenue bond in the Bencyn acquisition that was used for financing a manufacturing facility in Lafayette, IN. Interest (1.95% at December 31, 2001) was payable quarterly. Principal was to be repaid in varying amounts beginning October 2001 through October 2012. The bond was prepaid in February 2002 from the proceeds of the Senior Subordinated Notes.

6. STOCK PURCHASE PLANS

Pursuant to the Key Employee Stock Purchase Plan adopted by the Company in 1987 and the Outside Director Stock Purchase Plan adopted in 1992, participating eligible employees (as determined by the Board of Directors) of the Company and its subsidiaries and participating outside directors (as determined by the Executive Committee of the Board of Directors) are provided the opportunity to purchase stock of the Company. Each participant may purchase, within ten days of the offer, shares of stock at the fair market value, as determined by the Company's independent appraisal firm, on the date the offer is made.

During 2000, the Company issued 5,000 shares of common treasury stock to participants in the plans at \$17.00 per share. No shares were issued under the plans during 2001 or 2002. At December 31, 2002, 81,379 shares of common treasury stock are reserved for issuance under the Key Employee Stock Purchase Plan and 81,000 shares are reserved under the Outside Directors Stock Purchase Plan.

7. STOCK OPTION PLANS

The Company maintains various stock incentive plans that have been approved by the shareholders to attract, retain and motivate key employees and non-employee directors. The Equity Compensation Plan (the "1993 Plan") provides for the grant of stock options, stock appreciation rights and/or restricted stock to certain key employees and non-employee directors of the Company. Another Stock Option Plan created in 1990 for Key Employees and Directors, which provides for the grant of non-qualified stock options and/or stock appreciation rights, is currently inactive.

Under the plans, the option period may not exceed 10 years (in the case of incentive stock options, not more than five years for individuals who own more than 10% of the voting power of the Company's stock at the date of grant). The options granted under the plans may be exercised, subject to cumulative annual limits not exceeding 25%, beginning with the date of grant or first anniversary thereafter. Options under the 1993 Plan may be exercised at not less than 100% of the fair market value (as determined by the Company's independent appraisal firm) of the Company's stock at the date the option was granted (in the case of incentive stock options, at not less than 110% of the fair market value for individuals who own more than 10% of the voting power of the Company's stock at the date of grant.) Options under the 1990 Plan may be exercised at not less than 50% of the fair market value of the Company's stock at the date the option was granted. Options granted, exercised and expired during 2002, 2001 and 2000 are summarized as follows:

	Shares	Stock Options Price Range Per Share	Weighted Average Price
Outstanding, January 1, 2000	345,203	\$13.90 - \$23.00	\$18.17
Granted	142,900	17.00 - 18.70	17.06
Exercised	(16,666)	13.90 - 15.00	14.54
Forfeited	<u>(55,666)</u>	13.90 - 23.00	17.78
Outstanding, December 31, 2000	415,771	\$15.00 - \$23.00	\$17.97
Granted	—	—	—
Exercised	(6,666)	15.00	15.00
Forfeited	<u>(42,694)</u>	15.00 - 23.00	18.64
Outstanding, December 31, 2001	366,411	\$15.00 - 23.00	\$17.95
Granted	—	—	—
Exercised	—	—	—
Forfeited	<u>(5,000)</u>	17.00	17.00
Outstanding, December 31, 2002	<u>361,411</u>	\$15.00 - \$23.00	\$17.96

Range of Exercise Prices	Number of Shares		Weighted Average Remaining Contractual Life in Years
	Outstanding	Exercisable	
\$15.00	117,831	111,153	1.0
17.00	114,900	57,450	8.0
18.70	5,000	2,500	3.0
20.00	55,650	55,650	3.0
23.00	<u>68,030</u>	<u>68,030</u>	4.5
	<u>361,411</u>	<u>294,783</u>	4.2

As of December 31, 2002, 2001 and 2000, respectively, there were 70,520, 65,520 and 22,826 shares of common treasury stock available for grants under the 1993 Plan and 900,000 shares available for grants under the 1990 Plan. As of December 31, 2002, 2001 and 2000, 294,783, 259,391 and 233,679 options were exercisable at weighted average exercise prices of \$18.21, \$18.42 and \$18.37, respectively.

Had compensation cost for stock options been determined consistent with SFAS No. 123, "Accounting for Stock-Based Compensation," the Company's pro forma net income (loss) and earnings (loss) per share would have been: \$(1,856) and \$(0.44), respectively, for the year ended December 31, 2002; \$2,010 and \$0.46, respectively, for the year ended December 31, 2001 and \$(1,066) and \$(0.25), respectively, for the year ended December 31, 2000. In accordance with the requirements of SFAS 123, this method of accounting has not been applied to options granted prior to the fiscal year beginning January 1, 1995. The resulting pro forma compensation cost may not be representative of that to be expected in future years.

The fair value of each stock option grant is estimated on the date of grant (\$4.69 in 2000) using the Black-Scholes option pricing model with volatility assumed to be zero and the following weighted average assumptions used for grants in 2000: risk-free interest rates of 5.26%, expected dividend yields of 1.35% and expected lives of ten years for the options granted December 15, 1995; June 6, 1997; December 22, 1997; and December 18, 2000.

8. DEFERRED COMPENSATION

Deferred compensation consists primarily of government mandated severance payments in certain foreign countries and retirement benefits for the former owners of certain foreign companies acquired in 1992.

9. EMPLOYEE PENSION PLANS

The Company sponsors a defined contribution plan that provides substantially all domestic salaried and domestic hourly employees an opportunity to accumulate funds for their retirement. The Company may make discretionary matching contributions to the plan in the form of Company common stock. During 2000, the Company matched a percentage of participant contributions with common stock valued at \$455. The Company did not provide a matching contribution in 2001 or 2002.

The Company has defined benefit pension plans covering substantially all U.S. salaried and hourly employees (hereafter "domestic plans") and Canadian and United Kingdom employees (hereafter "foreign plans.") The domestic plans provide benefits based on an employee's years of service and compensation received for the highest five consecutive years of earnings. The foreign plans provide benefits based on a formula of years of service and a percentage of compensation which varies among the foreign plans. Pension expenses as presented for years ended December 31, 2002, 2001 and 2000 and funded status is presented as of December 31, 2002 and 2001, respectively, except for the plan assets at fair value for the United Kingdom plan, which are determined as of September 30, 2002 and 2001, respectively. The Company's funding policy is consistent with funding requirements of applicable government laws and regulations.

Periodic pension expense (income) is as follows:

	Year Ended December 31					
	2002		2001		2000	
	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign
Net Pension Expense (Income):						
Actual (return) loss on net assets	\$3,160	\$4,832	\$ (106)	\$4,209	\$1,314	\$4,103
Service cost-benefits earned during period	887	927	796	1,053	787	1,034
Interest cost on projected benefit obligation	1,674	2,292	1,549	2,144	1,483	2,220
Net amortization and deferral	(5,492)	(7,443)	(2,337)	(7,125)	(4,421)	(6,974)
Employee contribution	—	(391)	—	(382)	—	(421)
Gain on curtailment	—	—	(42)	—	—	—
Recognized actuarial (gain) loss	—	89	(159)	—	—	—
	<u>\$ 229</u>	<u>\$ 306</u>	<u>\$ (299)</u>	<u>\$ (101)</u>	<u>\$ (837)</u>	<u>\$ (38)</u>

A reconciliation of the funded status of the Company's defined benefit plans to amounts recognized in the Consolidated Balance Sheets is as follows:

	2002		2001	
	Domestic	Foreign	Domestic	Foreign
Fair value of plan assets	\$22,665	\$33,091	\$27,247	\$35,337
Projected benefit obligation	(25,616)	(44,150)	(22,069)	(37,674)
Funded status	(2,951)	(11,059)	5,178	(2,337)
Unrecognized (gain) loss from past experience	5,407	14,671	(2,524)	5,179
Unrecognized transition obligation (asset)	(205)	(119)	(244)	(160)
Unrecognized prior service cost	743	346	813	364
Net amount recognized	<u>\$ 2,994</u>	<u>\$ 3,839</u>	<u>\$ 3,223</u>	<u>\$ 3,046</u>

Amounts recognized in the Consolidated Balance Sheets are as follows:

Prepaid benefit cost	\$2,994	\$ —	\$3,223	\$3,046
Accrued benefit liability	—	(6,186)	—	(286)
Intangible asset	—	346	—	52
Accumulated other comprehensive loss	—	9,679	—	234
	<u>\$2,994</u>	<u>\$3,839</u>	<u>\$3,223</u>	<u>\$3,046</u>

Significant actuarial assumptions used to calculate projected benefit obligations and periodic pension expense are as follows:

	2002		2001	
	Domestic	Foreign	Domestic	Foreign
Discount rate	7.0%	5.75% - 6.75%	7.50%	6.00% - 6.75%
Rate of return on assets	9.0%	7.25%	9.00%	7.25% - 7.50%
Salary growth	4.0%	3.75% - 4.0%	4.00%	4.00%

At December 31, 2002, each foreign plan's accumulated benefit obligation exceeded the fair value of the respective plan assets. The total of such accumulated benefit obligation, projected benefit obligation and fair value of plan assets, was \$36,968, \$44,150 and \$33,091, respectively.

At December 31, 2001, one of the foreign plan's accumulated benefit obligation exceeded the fair value of its assets. The accumulated benefit obligation, projected benefit obligation and fair value of assets amounted to \$2,058, \$2,168 and \$1,874, respectively.

10. INCOME TAXES

The provision for income taxes is summarized as follows:

	Year Ended December 31		
	2002	2001	2000
Current:			
U.S. Federal	\$ —	\$(1,497)	\$ 196
U.S. State	156	68	125
Foreign	1,762	1,060	1,883
Total current	1,918	(369)	2,204
Deferred	(1,286)	1,777	(198)
Total	<u>\$ 632</u>	<u>\$1,408</u>	<u>\$2,006</u>

Effective Tax Rate

The difference between the worldwide effective tax rate and the U.S. statutory tax rate of 34% results primarily from higher foreign tax rates, valuation allowance on foreign tax loss carryforwards and the effect of state taxes. As of December 31, 2002, Brazilian tax loss carryforwards total \$2,164, German tax loss carryforwards total \$4,318, Netherlands tax loss carryforwards total \$1,474, United States tax loss carryforwards total \$2,071.

Deferred income taxes arise due to certain items being includable in the determination of taxable income in periods different than for financial reporting purposes. The tax effect of significant types of temporary differences and carryforwards that give rise to the Company's deferred tax assets and liabilities as of December 31, 2002 and 2001 follows:

	2002	2001
Deferred Tax Assets:		
Accrued expenses	\$1,150	\$1,316
Deferred revenue	118	498
Inventory	81	109
Tax loss carryforwards	10,321	6,436
Foreign credit carryforwards	1,377	888
Other	209	103
Gross deferred tax assets	13,256	9,350
Valuation allowance	(7,034)	(5,251)
	<u>6,222</u>	<u>4,099</u>
Deferred Tax Liabilities:		
Fixed assets	(1,049)	(769)
Accrued pensions	(1,146)	—
Prepaid expenses	—	(2,607)
Other	(377)	—
	<u>(2,572)</u>	<u>(3,376)</u>
Net deferred tax assets	<u>\$3,650</u>	<u>\$ 723</u>

At December 31, 2002 and 2001, the valuation allowance related primarily to foreign tax loss carryforwards. During 2001, the valuation allowance related to foreign tax credit carryovers in the amount of \$1,704 was reversed.

No provision has been made for undistributed earnings of certain subsidiaries (aggregating approximately \$37,674 and \$38,707 at December 31, 2002 and 2001, respectively), which earnings are not expected to be paid to the Company as dividends, since future investment requirements are in excess of these earnings.

Income taxes paid were \$1,517, \$2,276 and \$2,893 for the years ended December 31, 2002, 2001 and 2000, respectively.

11. FUTURE MINIMUM RENTAL PAYMENTS

The future minimum rental payments required under operating leases that have initial or remaining noncancellable lease terms in excess of one year as of December 31, 2002 are as follows:

2003	\$2,203
2004	1,781
2005	1,193
2006	629
2007	202
2008 and thereafter	—
Total	<u>\$6,008</u>

Rent expense for 2002, 2001 and 2000 on operating leases aggregated \$3,285, \$3,303 and \$3,801, respectively.

12. COMMITMENTS AND CONTINGENCIES

The Company participates in certain payments in connection with Environmental Protection Agency consent orders related to certain hazardous waste cleanup activities under the federal Superfund statute. Cleanup activities at a Superfund site in which the Company is participating are in the final phase, which includes ongoing activities such as treatment of soil vapor extraction, biodegradation of contaminated subsurface soils and groundwater monitoring at the site. As of December 31, 2002 and 2001, the Company had accrued \$729 and \$818, respectively, for these activities. Based upon current estimates, the total cost of these ongoing activities is not expected to have a material effect upon the Company's consolidated financial statements.

Additionally, there are various claims and pending actions against the Company and its subsidiaries arising out of the normal conduct of its business. While the outcome of these matters is currently not determinable, the Company's management does not believe that the resolution of these matters will have a material adverse impact on the Company's consolidated financial position, results of operations or cash flows.

At December 31, 2002 the Company had letters of credit outstanding totaling \$800 which support certain debt instruments of subsidiaries and guarantee performance of certain trade activities. As of December 31, 2002, the Company does not have any significant commitments or guarantees that are not reflected in the accompanying financial statements or disclosed in the notes thereto.

13. FINANCIAL INSTRUMENTS AND CONCENTRATIONS OF CREDIT RISK

Credit risk represents the accounting loss that would be recognized at the reporting date if counterparties failed completely to perform as contracted. Concentrations of credit risk (whether on or off balance sheet) that arise from financial instruments exist for groups of customers or counterparties when they have similar economic characteristics that would cause their ability to meet contractual obligations to be similarly affected by changes in economic or other conditions. Financial instruments with potential credit risk include cash and cash equivalents, an interest rate hedge agreement and accounts receivable.

The Company maintains cash and cash equivalents with various major financial institutions. Concentrations of credit risk with respect to receivables are generally limited due to the Company's large number of customers and their dispersion across many countries and industries. At December 31, 2002 and 2001, the Company had no significant concentrations of credit risk.

The Company has entered into interest rate hedge agreements to change the fixed/variable interest rate mix of its debt portfolio thereby reducing the Company's aggregate risk to movements in interest rates. By using such derivative financial instruments to hedge exposures to changes in interest rates, the Company exposes itself to credit risk and market risk. Credit risk for these agreements is the risk that the counterparty might fail to fulfill its performance obligations under the terms of the derivative contract. Market risk is the risk that the value of a financial instrument might be adversely affected by a change in interest rates.

At December 31, 2002, the Company had the following interest rate hedge agreement in effect under which it is reimbursed the excess of a variable rate above a stated maximum rate and is responsible for payment of the excess of a variable rate below a stated minimum rate:

Interest Hedge	Expiration Date	Notional Amount	Maximum Rate	Minimum Rate
US 3 month LIBOR	January 2004	\$16,000	6.00%	5.30%

The following disclosure of the estimated fair value of financial instruments is made in accordance with SFAS No. 107, "Disclosures about Fair Value of Financial Instruments." The estimated fair value amounts have been determined by the Company using available market information and appropriate valuation methodologies.

For short-term debt and long-term debt the rates currently available to the Company for debt with similar terms and remaining maturities are used to estimate the fair value for debt outstanding. At December 31, 2002 the fair value of such debt instruments approximates the carrying value.

The fair value of interest rate hedge agreements as of December 31, 2002 and 2001 was \$(762) and \$(788) respectively. In July 2001, a European interest rate hedge agreement with a notional amount of approximately \$16,550 at December 31, 2001 exchange rates was closed out for a pretax gain of \$480. In August 1999, a domestic interest rate hedge agreement with a notional amount of \$25,000 was closed out for a pretax gain of \$1,413. The gains are being amortized as a reduction of interest expense over the remaining years of the agreements, respectively, \$485, \$407 and \$329 were credited against interest expense in 2002, 2001 and 2000. In accordance with the transition requirements of SFAS 133, the Company recorded cumulative effect adjustments in other comprehensive income of \$352, net of tax, for the unrealized gain on hedges held and \$577, net of tax, for the unamortized portion of the after tax realized gain on closed hedges as of January 1, 2001.

14. RESTRUCTURING AND OTHER OPERATING EXPENSES

Restructuring and other operating expenses consists of the following:

	Year End December 31		
	2002	2001	2000
Restructuring charges:			
Severance costs	\$1,149	\$3,015	\$3,400
Facility closing costs	446	—	—
Total restructuring charges	\$1,595	\$3,015	\$3,400
Costs of obtaining and developing computer software for internal use	—	396	1,259
Post-retirement benefit adjustments	—	—	498
Asset impairments	1,174	—	—
	<u>\$2,769</u>	<u>\$3,411</u>	<u>\$5,157</u>

Restructuring charges reflect streamlining and operational capacity realignments primarily in the U.S. and Europe resulting in the elimination of 44, 83 and 106 employee positions during 2002, 2001 and 2000, respectively, through primarily involuntary severance programs. At December 31, 2002, 2001 and 2000, respectively, \$269, \$800 and \$558 of severance related costs remained unpaid. Facility closing costs include costs incurred to idle various facilities. Asset impairments reflect a loss of \$674 on a building no longer in use and a loss of \$500 on a facility to be disposed. The costs of computer software for internal use relate to an enterprise information systems project in the U.S. This project was accounted for in accordance with American Institute of Certified Public Accountants Statement of Position 98-1 whereby certain costs incurred during the application development stage were capitalized

while costs incurred during the preliminary project and post-implementation stages and all costs for training and data conversion were charged to expense as incurred. Adjustments to post-retirement benefits pertain to pension and death benefit arrangements.

15. BUSINESS ACQUISITION

In January 2000, the Company acquired Bencyn, Inc. and an associated real estate holding company located in Lafayette, IN for approximately \$13,809, including acquisition costs. Bencyn is a specialty processing products and services company. The Company accounted for the acquisition of Bencyn as a purchase; accordingly assets and liabilities acquired are recorded at their fair value and the excess of purchase price over the fair value of net assets acquired of \$14,137 (including \$4,463 of Bencyn debt) is allocated to goodwill. Results of operations of Bencyn are included in the financial statements from the date of acquisition.

16. OTHER EVENTS

Prior to 2002, the Company's 50% owned affiliate in Korea discovered that an embezzlement of funds occurred. The Company has recorded charges of \$359 and \$1,043 in equity in net income of affiliates in the accompanying statements of income for the years 2001 and 2000, respectively to reflect its share of the losses.

REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors and Stockholders of Houghton International Inc.

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations, comprehensive loss, changes in stockholders' equity and of cash flows present fairly, in all material respects, the financial position of Houghton International Inc. and its subsidiaries at December 31, 2002 and December 31, 2001, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2002 in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

The Company has significant debt due principally in 2004. Management's strategies to satisfy the liquidity requirements are discussed in Note 5. In addition, as discussed in Note 1, the Company adopted new financial accounting standards during 2002.

PricewaterhouseCoopers LLP

Philadelphia, PA
March 21, 2003

DIRECTORS AND OFFICERS

CORPORATE OFFICERS

William F. MacDonald, Jr.
Chief Executive Officer

Daniel W. Fisher
Vice President - Houghton FLUIDCARE

Joseph G. Wintsch
Vice President - Sales

Thad L. Piatkowski
President - Houghton Metal Finishing

Rosauro V. Holgado
Vice President - Technical Service

Dr. Joseph F. Warchol
Vice President - Technical

William J. Streich
Vice President - Finance, Secretary/Treasurer

Jay C. Rohr
Controller

BOARD OF DIRECTORS

The following listing reflects board composition as of March 31, 2003

John D. Brennan
Business Development Consultant

Charles P. Connolly, Jr.
*Retired President and CEO,
First Union National Bank
Pennsylvania and Delaware*

Theodore G. Kauffman
Private Investor

William F. MacDonald, Jr.
Chairman of the Board and CEO

David W. Moser
*President
DFT Incorporated*

W. Lloyd Snyder III
*Principal, Snyder and Company
Chairman of the Board,
Huff Paper Company*



Houghton International Inc.
P.O. Box 930, Valley Forge, PA 19482-0930
(610) 666-4000

HOUGHTON INTERNATIONAL, INC.

Annual Report 2003



North American Sales Offices and Plants

ALLENTOWN
6681 Snowdrift Road
Allentown, PA 18106

CANADA
Houghton Canada Inc.
100 Symes Road
Toronto M6P 3J5, Ont.

CARROLLTON
421 Garrett Street
Carrollton, GA 30117

CHICAGO
6600 S. Nashville Avenue
Chicago, IL 60638

FORT WORTH
4734 Highway 377 S., Suite 20
Fort Worth, TX 76116

HOUSTON*
1918 Collingsworth Street
Houston, TX 77215

LAFAYETTE
3150 S. Country Road 460 East
Lafayette, IN 47905

SOUTHFIELD
26111 Evergreen Road, Suite 200
Southfield, MI 48076

HOUGHTON FLUIDCARE
Bank One Tower, Suite 710
201 Main Street
Lafayette, IN 47901

HOUGHTON METAL FINISHING
1055 Windward Ridge Parkway
Suite 140
Alpharetta, GA 30005

HOUGHTON OFFSHORE
10375 Richmond Avenue
Suite 1105
Houston, TX 77042

*Warehouse Location

Worldwide

AUSTRALIA
Houghton Australia Pty. Ltd.

BRAZIL
Houghton Brasil LTDA

CHINA
Houghton (China) Co., Ltd.

DENMARK
Houghton Danmark A/S

FRANCE
Houghton S.A.S.

GERMANY
Houghton Deutschland GmbH

HONG KONG
Houghton Asia Pacific Co.

IRELAND
Houghton Oils & Chemicals
(Ireland) Ltd.

ITALY
Houghton Italia S.p.A.

JAPAN
Houghton Japan Co., Ltd.

KOREA
Korea Houghton Corporation

MEXICO
Especialidades Químicas
Monterrey S.A.

THE NETHERLANDS
Houghton Benelux BV

NORWAY
Houghton Norge A.S.

POLAND
Houghton Polska SP. Z.O.O.

SINGAPORE
Houghton Singapore

SPAIN
Houghton Iberica S.A.

SWEDEN
Houghton Sverige AB

SWITZERLAND
Houghton (Schweiz) AG

TAIWAN
Houghton Taiwan Co., Ltd.

THAILAND
Thai Houghton 1993 Co., Ltd.

TURKEY
Houghton Kimya Sanayi A.S.

UNITED KINGDOM
Houghton plc

HOUGHTON'S MISSION

To be the World Leader in the management of chemical processes through strategic partnerships with clients and suppliers to maximize shareholder value.

FINANCIAL HIGHLIGHTS

(Dollars in thousands except per share amounts)

	2003	2002	2001
For the year			
Sales	\$343,154	\$311,567	\$304,878
Net income (loss)	1,673	(1,718)	2,113
Per common share			
Earnings	\$ 0.40	\$ (0.40)	\$ 0.49
At year end			
Total assets	\$240,933	\$224,161	\$221,530
Shareholders' equity	72,131	59,923	61,259

Houghton International Inc. is a global supplier of industrial fluids and chemical management services, primarily for the metalworking industry. Founded in 1865, the Company completed its 138th year in 2003.

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TO OUR SHAREHOLDERS:

The Net Sales of Houghton International increased to \$343 million in 2003 while our Operating Profit improved to nearly \$13 million. We realized these increases despite the still sluggish economic activity enveloping the manufacturing sector of most of the world's economies. We began to see signs of a recovery at mid-year, but the level of improvement was barely perceptible. We therefore continued upon our strategy in recent years of pursuing growth through new products, new customers and corporate re-engineering.

In the United States, demand for our products bottomed in the second quarter and then began a slow recovery. Joe Wintsch, Vice President, Sales and Marketing, intensified our emphasis upon seeking product trials, new customer penetration and seeking additional market share through a broader based distributor program. Hank Limper just kept preaching his gospel of Hocut 795 to all who would listen - and many did and converted their coolant systems to this high performance cost-effective product. Their combined efforts coupled with renewed determination by our technical representatives have paid off with a lot of new business and renewed confidence in our capability. What we need now is a lift in manufacturing activity which is finally unfolding.

Our FLUIDCARE team led by Dan Fisher, Vice President, FLUIDCARE, and David Hays, Manager of Operations, made good progress in optimizing our contract management and service delivery. We have improved our accounting and operational controls as well as the service delivery of our site management team. Cooperation between our FLUIDCARE organization and our technical representatives has steadily increased and bodes well for our future success. We are again on the offensive after a period of consolidation and have realized several significant wins in the last few months.

In Europe, Paul Miller, President, Houghton Europe, continued his program to unify our European operations under one operating management team for all of Europe. We completed the last phases of the restructuring we have been undertaking over there for the last several years and realized positive operating results from this program. Slow manufacturing activity in Europe mirrored our own so we had a similar emphasis upon reaching out for new business. We also

increased our activity and commitment to Eastern Europe which is fertile ground for new business development due to the steady influx of investment in that area. Inexpensive real estate, educated and motivated employees with lower wages and benefits than in Western Europe and close proximity to Western Europe make that area very attractive for new investments in manufacturing.

In Canada, we enjoyed another year of solid sales and profitability. Our team there is aggressive and capable and enjoys a strong market share. Jake Pajak moved from the Canadian payroll to the U.S. payroll to fill a critical need as Field Technical Manager for large automotive customers.

In Australia, we had another solid year, consolidating the re-engineering we had undertaken the previous year. We are poised for further improvement in the new year. Our Australian team also supports our Thailand-Indonesian-Malaysian business which again increased sales and profits in that vibrant part of the world. This growth should continue into the new year. C.Y. Lai led his growing team in China to another fine year of growth in sales and profitability. That economy is booming and we are trying to maintain our share of that growth. We are currently building a new plant in Shanghai which will be completed in 2004. We are adding to staff and steadily increasing our customer list, product range and staff capability while maintaining a cautious control upon our finances. There is, it seems, little to halt the underlying growth of that economy and we expect to share in that growth.

We have undertaken a major restructuring of the management, staffing and business plan of Houghton Japan in the last six months. Our business there is small and has been stagnant. We have been unable to penetrate the Japanese metalworking industry there and throughout the world with any great degree of success to date. With new management in place, renewed cooperation with our joint venture partner in Japan, Kyodo Yushi, a solid business plan for market development and additional staff and commitment here in North America, we feel we have now much greater probability of success with this large market potential.

Houghton Korea had a solid year of progress in 2003 as did Houghton Brazil. Carlos

Lanza, our General Manager, has brought our Company there through some difficult years and delivered a dramatic improvement in profitability while reducing our debt. Thanks are due to Carlos and his management team.

Our financial performance and condition continued to improve. We continued to pay down debt, a process that is somewhat obscured by the increase registered by our Euro dominated debt due to the huge devaluation of the dollar against the Euro over the course of 2003. Bill Streich led the lengthy and complicated process of re-financing our bank credit. We have spread the credit more broadly over our operating companies and brought in new and additional banks to support our credit needs. This process required lengthy due diligence on their part and a whole lot of research and reporting by Bill Streich, Jay Rohr, Dick Niwinski, Mark Bishop and their counterparts around the world. Certainly, everyone performed yeoman's work and the full refinancing was finally completed on March 12, 2004.

Hempstead & Co. has again analyzed our Company's business in order to determine the value of Houghton International Inc. common stock for transactions involving the Company's 401 K Plan. They have concluded that the value of a share of Houghton International common stock for these transactions as of December 31, 2003 is \$18.00. This valuation takes into account the dilution from the issue of warrants with the placement of our subordinated debt issue early in 2002.

We have continued to talk with prospective investors in our Company, but frankly have found their offerings to be less than appealing in terms of pricing and conditions for investment. Particularly in view of our improving results and prospects, the timing for such a limited and restrictive investment has seemed inopportune. Nevertheless, we are still restricted from any current dividend payment or stock re-purchase during 2004 under our new bank agreements. Our creditors want us to utilize our cash flow to reduce our debt further. This mandate reflects current credit conditions as much as our particular situation. Our creditors are well pleased with our current operating performance. Still, we clearly recognize that our shareholders desire some liquidity from their investment in Houghton either as dividends or sale of shares. Accordingly, now that we are back on track with our operating results,

financial position and future prospects, we will be developing a program to provide this liquidity in a fundamental way as soon as possible. Recognize, however, that this also cannot be done until 2005.

We are then led to our outlook for the future. As we anticipated, we did not experience any significant upturn in the underlying demand for our products throughout the world in 2003. Fortunately, the trend is our friend at last in 2004. Demand for our products is improving. We have obtained and are obtaining new business with our direct sales of product and with new FLUIDCARE contracts. We are also continuing to realize reductions in our cost of operations, offset to some degree by some increases in the costs of our raw materials. There can be little question that we will show further improvement in our results for 2004. To reiterate my comments of a year ago, we have redirected and re-engineered our Company during a very difficult economic period. We have done more faster than we otherwise might have due to the urgency of showing improved results. We are today a stronger, more capable organization than ever before in our long history. We also have a lot of opportunities before us and more than enough capabilities to meet the challenges that will face us as well. We simply cannot know just how successful we can be in a favorable economy with our economical and energized business platform, but I can assure you that we intend to find out!

Sincerely,



William F. MacDonald, Jr.
Chairman of the Board

CONSOLIDATED BALANCE SHEETS

December 31, 2003 and 2002

(Dollars in thousands except share and per share amounts)

ASSETS	2003	2002
CURRENT ASSETS:		
Cash, restricted cash and cash equivalents	\$ 14,192	\$ 11,388
Trade receivables (less allowance for doubtful accounts - 2003, \$2,825; 2002, \$3,431)	73,748	67,005
Inventories	37,234	34,216
Other current assets	7,171	8,293
Deferred income taxes	852	1,349
Assets held for sale	714	918
Total current assets	133,911	123,169
INVESTMENTS AND ADVANCES:		
Equity affiliates	9,374	7,421
Other	777	733
Total investments and advances	10,151	8,154
PROPERTY, PLANT AND EQUIPMENT:		
Land and buildings	51,392	46,935
Machinery and equipment	92,112	82,537
Leasehold improvements	135	31
Construction in progress	933	779
Total	144,572	130,282
Accumulated depreciation	(91,224)	(80,086)
Total property, plant and equipment, net	53,348	50,196
OTHER ASSETS:		
Goodwill	34,910	32,043
Prepaid pension costs	2,050	2,994
Deferred income taxes	3,096	4,874
Other assets	3,467	2,731
Total other assets	43,523	42,642
TOTAL	\$240,933	\$224,161

See notes to consolidated financial statements.

LIABILITIES AND STOCKHOLDERS' EQUITY	2003	2002
CURRENT LIABILITIES:		
Short-term debt	\$ 7,735	\$ 6,458
Current portion of long-term debt	5,741	2,086
Accounts payable	41,963	41,491
Accrued compensation and other	13,777	15,907
Income taxes payable	1,424	—
Deferred income taxes	440	1,187
Total current liabilities	71,080	67,129
LONG-TERM DEBT	85,553	84,250
OTHER LIABILITIES:		
Deferred compensation	3,429	2,580
Accrued pension	6,607	7,115
Deferred income taxes	436	1,386
Minority interests and other	1,697	1,778
Total other liabilities	12,169	12,859
COMMITMENTS AND CONTINGENCIES (Note 12)		
STOCKHOLDERS' EQUITY:		
Capital stock - par value, \$0.50 a share:		
Noncumulative 6% voting preferred, call price		
\$0.53 a share - authorized 500,000 shares	—	—
Common stock - par value, \$0.50 a share:		
authorized 25,000,000; issued 10,613,600 shares;		
outstanding 2003 - 4,172,512 shares,		
2002 - 4,217,674 shares	5,307	5,307
Additional paid-in capital	22,870	22,862
Retained earnings	123,728	122,055
Accumulated other comprehensive loss	(7,707)	(19,472)
Total	144,198	130,752
Treasury stock, at cost (2003: 6,441,088 shares;		
2002: 6,395,926 shares)	(72,067)	(70,829)
Total stockholders' equity	72,131	59,923
TOTAL	<u>\$240,933</u>	<u>\$224,161</u>

CONSOLIDATED STATEMENTS OF OPERATIONS

(Dollars in thousands, except per share amounts)

	Year ended December 31		
	2003	2002	2001
Net sales	\$343,154	\$311,567	\$304,878
Cost of goods sold	<u>242,535</u>	<u>219,298</u>	<u>215,990</u>
GROSS PROFIT	100,619	92,269	88,888
Selling, general and administrative expenses	86,074	80,198	80,115
Restructuring and other operating expenses	<u>1,783</u>	<u>2,769</u>	<u>3,411</u>
OPERATING INCOME	<u>12,762</u>	<u>9,302</u>	<u>5,362</u>
OTHER INCOME (EXPENSE), NET:			
Interest expense, net	(8,443)	(8,944)	(7,182)
Gain (loss) on business disposal	(454)	(1,419)	5,760
Other, net	<u>1,626</u>	<u>(25)</u>	<u>(419)</u>
Total other expense	<u>(7,271)</u>	<u>(10,388)</u>	<u>(1,841)</u>
INCOME (LOSS) BEFORE INCOME TAXES	5,491	(1,086)	3,521
Provision for income taxes	<u>3,818</u>	<u>632</u>	<u>1,408</u>
NET INCOME (LOSS)	<u>\$ 1,673</u>	<u>\$ (1,718)</u>	<u>\$ 2,113</u>
BASIC EARNINGS (LOSS) PER SHARE OF COMMON STOCK	<u>\$ 0.40</u>	<u>\$ (0.40)</u>	<u>\$ 0.49</u>
DILUTED EARNINGS (LOSS) PER SHARE OF COMMON STOCK	<u>\$ 0.37</u>	<u>\$ (0.40)</u>	<u>\$ 0.48</u>

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS

(Dollars in thousands)

	Year ended December 31		
	2003	2002	2001
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net income (loss)	\$ 1,673	\$(1,718)	\$ 2,113
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	7,465	7,349	9,768
Debt issuance cost amortization	734	659	420
Loss (gain) on disposal of property, plant and equipment	(1,582)	(335)	704
Loss (gain) on business disposal	454	1,419	(5,760)
Asset impairments	—	1,174	—
Equity in net income of affiliates	(1,128)	(947)	(422)
Pension expense	2,373	535	(400)
Non-cash interest and amortization on senior subordinated notes	1,113	1,047	—
Deferred income taxes	1,055	(528)	1,638
Changes in current assets and liabilities:			
Accounts receivable	(29)	3,474	3,912
Inventories	1,633	(829)	(1,432)
Prepaid expenses and other assets	5,597	(796)	(9,487)
Accounts payable	(4,599)	(4,462)	(1,592)
Accrued expenses and other liabilities	(5,162)	3,076	4,039
Net cash provided by operating activities	<u>9,597</u>	<u>9,118</u>	<u>3,501</u>
CASH FLOWS FROM INVESTING ACTIVITIES:			
Purchases of property, plant and equipment	(6,469)	(4,549)	(4,741)
Proceeds from disposal of property, plant and equipment	2,674	1,350	144
Proceeds from business disposal	<u>—</u>	<u>7,102</u>	<u>7,950</u>
Net cash provided by (used in) investing activities	<u>(3,795)</u>	<u>3,903</u>	<u>3,353</u>
CASH FLOWS FROM FINANCING ACTIVITIES:			
Net proceeds (payments) of short-term debt - banks	1,735	(2,148)	370
Net purchases of treasury stock and stock options	(88)	(663)	(230)
Net proceeds (payments) of long-term debt	(2,603)	(3,018)	(5,600)
Debt issuance costs	<u>(741)</u>	<u>(1,674)</u>	<u>(110)</u>
Net cash used in financing activities	<u>(1,697)</u>	<u>(7,503)</u>	<u>(5,570)</u>
EFFECT OF EXCHANGE RATE CHANGES ON CASH	<u>(1,301)</u>	<u>(2,157)</u>	<u>(327)</u>
NET INCREASE IN CASH AND CASH EQUIVALENTS	2,804	3,361	957
CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR	<u>11,388</u>	<u>8,027</u>	<u>7,070</u>
CASH AND CASH EQUIVALENTS AT END OF YEAR	<u>\$14,192</u>	<u>\$11,388</u>	<u>\$ 8,027</u>

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY

(Dollars in thousands, except per share amounts)

	Common Stock	Additional Paid-In-Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Treasury Amount	Stock Shares
Balance at January 1, 2001	\$5,307	\$18,265	\$121,660	\$(15,640)	\$(67,359)	6,255,938
Net income	—	—	2,113	—	—	—
Common share purchases	—	—	—	—	(330)	18,565
Stock options exercised	—	77	—	—	23	(6,666)
Proceeds from stock purchase plan	—	24	—	—	—	—
Other comprehensive loss	—	—	—	(2,881)	—	—
Balance at December 31, 2001	\$5,307	\$18,366	\$123,773	\$(18,521)	\$(67,666)	6,267,837
Net loss	—	—	(1,718)	—	—	—
Common share purchases	—	—	—	—	(163)	9,499
Issuance of convertible subordinated notes	—	—	—	—	(3,000)	118,590
Issuance of detachable warrants	—	4,467	—	—	—	—
Proceeds from stock purchase plan	—	29	—	—	—	—
Other comprehensive loss	—	—	—	(951)	—	—
Balance at December 31, 2002	\$5,307	\$22,862	\$122,055	\$(19,472)	\$(70,829)	6,395,926
Net income	—	—	1,673	—	—	—
Common share purchases	—	—	—	—	(96)	6,291
Issuance of convertible subordinated notes	—	—	—	—	(1,150)	41,071
Proceeds from stock purchase plan	—	8	—	—	8	(2,200)
Other comprehensive income	—	—	—	11,765	—	—
Balance at December 31, 2003	\$5,307	\$22,870	\$123,728	\$ (7,707)	\$(72,067)	6,441,088

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

(Dollars in thousands)

	Year ended December 31		
	2003	2002	2001
Net income (loss)	\$1,673	\$(1,718)	\$2,113
Other comprehensive income (loss):			
Foreign currency translation adjustment	10,505	5,403	(2,795)
Minimum pension liability adjustment (net of taxes of \$489 in 2003 and \$(2,770) in 2002)	1,078	(6,079)	(234)
Cumulative effect of adopting SFAS No. 133 (net of taxes of \$620)	—	—	929
Net changes in derivatives designated as cash flow hedges (net of taxes of \$121 in 2003 and \$(184) in 2002)	182	(275)	(781)
Total other comprehensive income (loss)	11,765	(951)	(2,881)
Comprehensive income (loss)	\$13,438	\$(2,669)	\$ (768)

See notes to consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(Dollars in thousands, except share and per share amounts)

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. Business – Houghton International Inc. is a global supplier of industrial fluids and chemical management services, primarily for the metalworking industry. The principal markets for Houghton International Inc.'s products and services are the Americas, Europe and Asia.

B. Principles of Consolidation and Basis of Presentation – The consolidated financial statements include Houghton International Inc. and all majority owned and controlled subsidiaries (the Company) and, on an equity basis, 50% owned affiliates. All significant intercompany transactions and balances have been eliminated.

Total assets, liabilities and net income of equity affiliates amounted to \$40,619, \$21,809, and \$2,488, respectively, in 2003 and \$39,296, \$22,742, and \$1,894, respectively, in 2002.

C. Revenue Recognition - Sales are generally recognized when services are rendered or products are shipped, at which time title and risk of loss passes to the customer.

D. Shipping and Handling - The Company reports shipping and handling revenues as sales and the related cost as cost of goods sold.

E. Inventories – A portion of domestic inventories are recorded using the last-in, first-out (LIFO) cost method. Such LIFO amounts represent 69% and 62% of the applicable 2003 and 2002 domestic inventories prior to the LIFO adjustment, respectively. If the first-in, first-out (FIFO) method of inventory valuation had been used for all inventories by the Company, inventories would have been \$7,915 and \$8,245 higher at December 31, 2003 and 2002, respectively. During 2001, 2002 and 2003, inventory quantities were reduced, causing a liquidation of LIFO reserves. The liquidations reduced cost of goods sold by \$457 in 2003, \$395 in 2002 and \$675 in 2001. Other inventories are carried at the lower of cost or market, cost being determined by FIFO method. The Company's total inventory, net of LIFO and obsolescence reserves, consists of the following:

	December 31	
	2003	2002
Raw materials	\$13,215	\$11,560
Work in process	458	147
Finished goods	23,561	22,509
Total	<u>\$37,234</u>	<u>\$34,216</u>

F. Depreciation – Depreciation is provided generally on a straight-line basis over the estimated useful lives of the related assets. Depreciation expense, including depreciation on assets under capital leases, was \$7,465, \$7,349 and \$7,658 for the years ended December 31, 2003, 2002 and 2001, respectively.

G. Goodwill – Effective January 1, 2002, the Company adopted Statement of Financial Accounting Standards (SFAS) No. 142, "Goodwill and Other Intangible Assets." SFAS No. 142 requires goodwill to be tested for impairment on an annual basis and between annual tests in certain circumstances, and written down when impaired, rather than being amortized as previous accounting standards required. In accordance with SFAS No. 142, the Company ceased amortizing goodwill as of January 1, 2002. Based upon impairment tests performed at the transition date of January 1, 2002 and the testing dates of December 31, 2003 and November 30, 2002, there was no impairment of goodwill in 2003 and 2002. Prior to adoption of SFAS No. 142, goodwill was amortized on a straight-line basis over periods of 5 to 25 years. Amortization expense on goodwill was \$2,110 in 2001.

- H. Earnings Per Share of Common Stock – Basic and diluted earnings per share are computed using the weighted average number of shares of common stock outstanding. Common equivalent shares from convertible securities are included in the diluted computation when their effect is dilutive.
- I. Cash, Restricted Cash and Cash Equivalents – Cash and cash equivalents represent cash in banks and short-term investments having an original maturity of less than three months. Certain cash balances exceed Federal Deposit Insurance Corporation limits. Restricted cash of \$850 at December 31, 2003 represents amounts restricted statutorily in certain foreign countries for retirement benefits and a capital project.
- J. Foreign Currency Translation – The accounts of non-U.S. subsidiaries and affiliates are measured using local currency as the functional currency. For those operations, assets and liabilities are translated into U.S. dollars at year end exchange rates. Income and expense amounts are translated at the average exchange rates prevailing during the year. Net gains or losses resulting from such translation are accumulated in other comprehensive income (loss) within stockholders' equity. Gains and losses from foreign currency transactions are included in other income. For the years ended December 31, 2003, 2002 and 2001, such net gains (losses) were \$(540), \$392, and \$(101), respectively.
- K. Income Taxes – The Company accounts for income taxes under the asset and liability method in accordance with Statement of SFAS No. 109, "Accounting for Income Taxes."
- L. Environmental Expenditures – Environmental expenditures that relate to current or future revenues are expensed or capitalized as appropriate. Expenditures that relate to an existing condition caused by past operations, and do not contribute to current or future revenue generation, are expensed. Liabilities are recorded when environmental assessments and/or clean-ups are probable, and the costs can be reasonably estimated. Generally, the timing of these accruals coincides with the commitment to a formal plan of action.
- M. Long-Lived Assets and Assets Held for Sale – Effective January 1, 2002, the Company adopted SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets." SFAS No. 144 requires long-lived assets be tested for recoverability whenever events or changes in circumstances indicate that carrying values may not be recoverable. An impairment loss shall be recognized if the carrying amount of a long-lived asset is not recoverable and exceeds the fair value of the asset. The standard also establishes criteria to determine when long-lived assets are to be classified as "held for sale."
- The Company has classified certain land, buildings and equipment as "held for sale" in the accompanying Consolidated Balance Sheets. Management is actively marketing these assets for sale and expects to complete a sale within the next year. As such, these assets are recorded as current assets in the accompanying Consolidated Balance Sheets. Since the fair values, as determined by independent appraisal, of these assets are greater than the respective carrying amounts, no impairment loss has been recognized on these assets during 2003 and 2002.
- N. Estimates – The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results may differ from those estimates and assumptions.
- O. Derivatives and Hedging Activities – On January 1, 2001, the Company adopted SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities," as amended by SFAS No. 138 "Accounting for Certain Derivative Instruments and Certain Hedging Activities." Upon adopting SFAS No. 133, the Company recorded a net-of-tax cumulative-effect adjustment of \$929 related to previously designated cash flow hedges in other comprehensive income.

All derivatives are recognized on the accompanying Consolidated Balance Sheets at their fair value. Currently, the Company enters into derivative contracts to hedge exposures of interest rates (cash flow hedges). The changes in fair value of a derivative that is designated and qualifies as a cash flow hedge, to the extent that the hedge is effective, is recorded in other comprehensive income. Any hedge ineffectiveness (which represents the amount by which the changes in the fair value of the derivative exceed the variability in the cash flows of the forecasted transaction) is recorded in current-period earnings. When it is determined that a derivative is no longer effective as a hedge, the Company discontinues hedge accounting prospectively.

P. Stock-Based Compensation: The Company accounts for incentive and nonqualified stock option plans in accordance with Accounting Principles Board Opinion No. 25, under which compensation cost is recognized based on the difference, if any, between the appraised fair value of the Company's stock at the time of option grant and the amount the employee must pay to acquire the stock. The Company's options have been issued at fair market value at the time of grant.

Q. New Accounting Standards: In December 2002, the Financial Accounting Standards Board (FASB) issued SFAS No. 148, "Accounting for Stock-Based Compensation - Transition and Disclosure." The standard amends SFAS No. 123, "Accounting for Stock-Based Compensation," to provide alternative methods of transition for a voluntary change to the fair value based method of accounting for stock-based employee compensation. The Company has elected not to adopt SFAS No. 123 for options granted through 2003, but is assessing prospective adoption for future option grants.

In January 2003, the FASB Issued Financial Accounting Standards Board Interpretation No. 46 (FIN 46), "Consolidation of Variable Interest Entities." FIN 46, as revised, requires that if an entity has a controlling financial interest in a variable interest entity, the assets, liabilities and results of activities of the variable interest entity should be included in the consolidated financial statements of the entity. FIN 46 is effective immediately for all new variable interest entities created or acquired after January 31, 2003. For variable interest entities created or acquired prior to February 1, 2003, the provisions of FIN 46 must be applied to the first interim or annual period beginning after December 15, 2003. The Company is required to adopt the provisions of FIN 46 in 2004 and does not expect the adoption to have a material impact on its financial position or results of operations.

In April 2003, the FASB issued SFAS No. 149, "Amendment of Statement 133 on Derivative Instruments and Hedging Activities." SFAS No. 149 amends and clarifies accounting for derivative instruments, including certain derivative instruments embedded in other contracts, and for hedging activities under SFAS No. 133. In particular, this Statement clarifies under what circumstances a contract with an initial net investment meets the characteristic of a derivative and whether a derivative containing a financing component warrants special reporting in the statement of cash flows. This Statement is generally effective for contracts entered into or modified after June 30, 2003 and did not have a material impact on the Company's financial statements.

In May 2003 the FASB issued SFAS No. 150, "Accounting for Certain Financial Instruments with Characteristics of Both Liabilities and Equity." SFAS No. 150 established standards for how an issuer classifies and measures in its statement of financial position certain financial instruments with characteristics of both liabilities and equity. It requires that an issuer classify a financial instrument that is within its scope as a liability (or an asset in some circumstances) because that financial instrument embodies an obligation of the issuer. SFAS No. 150 is effective for financial instruments entered into or modified after May 31, 2003 and shall be effective at the beginning of the first interim period beginning after June 15, 2003. Adoption of this statement had no impact on the Company's financial statements.

R. Reclassifications - Certain reclassifications have been made to conform prior years' balances to current year presentations.

2. EARNINGS (LOSS) PER SHARE

The following table sets forth the computation of basic and diluted earnings (loss) per share.

	Year ended December 31		
	2003	2002	2001
Numerator:			
Numerator for basic earnings per share - net income (loss)	<u>\$1,673</u>	<u>\$(1,718)</u>	<u>\$2,113</u>
Denominator:			
Denominator for basic earnings per share - weighted average shares	4,193,953	4,255,692	4,352,564
Effect of dilutive warrants and employee stock options	<u>389,351</u>	<u>—</u>	<u>13,862</u>
Denominator for diluted earnings per share adjusted weighted average shares	<u>4,583,304</u>	<u>4,255,692</u>	<u>4,366,426</u>
Basic earnings (loss) per share	<u>\$0.40</u>	<u>\$(0.40)</u>	<u>\$ 0.49</u>
Diluted earnings (loss) per share	<u>\$0.37</u>	<u>\$(0.40)</u>	<u>\$ 0.48</u>

The following securities and their equivalent shares of common stock were not included in the computation of diluted earnings per share because they were anti-dilutive for the periods presented:

	Year ended December 31		
	2003	2002	2001
Employee stock options	112,438	361,411	366,411
Warrants, detachable from senior subordinated notes	—	382,815	—
Convertible subordinated notes	159,661	118,590	—
Total	<u>272,099</u>	<u>862,816</u>	<u>366,411</u>

3. BUSINESS DISPOSALS

On July 31, 2001, the Company sold Durferri GmbH, a German subsidiary, for approximately \$16,100 of which \$8,100 was paid at closing, \$7,200 was due in 2002 and the remainder was due in equal installments of \$400 in 2003 and 2004. A gain of \$5,760 was recognized in 2001 and is included in gain on business disposal in the accompanying Statements of Operations. The installments due in 2002, 2003 and 2004 were contingent upon Durferri GmbH achieving certain operational standards subsequent to the sale. During 2002, it became apparent that Durferri GmbH would not achieve such operating standards. Accordingly, the Company reached an agreement with the buyer whereby the 2002 installment was reduced by \$1,000 and the 2003 installment of \$400 was eliminated. The \$400 installment due in 2004 remains and is collateralized by a stand-by letter of credit. As a result, in 2002, the Company recorded a loss on business disposal of \$1,419. During 2003, German tax authorities levied assessments against the buyer for certain tax structures in place at the time of the sale. The Company is obliged to reimburse the buyer for such assessments. Accordingly, during 2003, the Company has reserved \$454 additional loss on the Durferri sale, as an estimate of the total due the buyer for reimbursement of the tax assessments.

During 1998, the Company sold its worldwide paper chemicals business to Hercules Incorporated. As part of the agreement of sale, the Company entered into a know-how sharing agreement and a transition product and services agreement, and agreed not to compete against Hercules. These agreements required the Company to provide certain training and support and not to directly compete in the paper chemicals business against Hercules for a period not to exceed five years. In accordance with the terms of the agreements, the Company received five annual installments of \$2,000 beginning October 1998 through October 2002. These payments were recognized as income over the annual period of April to March. The final \$500 of such income was recognized during the first quarter of 2003.

4. SHORT-TERM DEBT

Short-term debt consists of borrowings under bank lines of credit and discounting facilities bearing interest at various rates. As of December 31, 2003 and 2002, such borrowings totaled \$7,735 and \$6,458, respectively. The unused portion of these facilities totaled \$10,547 and \$8,537, respectively. One of the credit lines is collateralized by machinery and equipment with a net book value of approximately \$257 and \$215 as of December 31, 2003 and 2002, respectively. The discounting facilities are secured by underlying accounts receivable and the bank lines of credit are unsecured.

5. LONG-TERM DEBT

Long-term debt is comprised of the following:

	December 31	
	2003	2002
Revolving credit agreement	\$48,444	\$48,148
Senior subordinated notes, net of discount	22,693	21,580
Term loans	9,418	8,823
Convertible subordinated notes	3,650	2,500
Obligations under capital leases	1,319	575
Other notes payable	5,770	4,710
Total	91,294	86,336
Current portion	(5,741)	(2,086)
Long-term debt	<u>\$85,553</u>	<u>\$84,250</u>

Fixed maturities of the Company's debt are as follows:

2004	\$ 5,741
2005	5,395
2006	6,095
2007	47,547
2008	80
2009 and thereafter	<u>26,436</u>
Total	<u>\$91,294</u>

The Company's management believes that the combination of cash on hand, cash generated by operations and, if necessary, additional borrowing under the current credit agreement will be sufficient to satisfy the Company's operating cash requirements in the short-term and long-term.

Interest paid was \$8,198, \$9,226, and \$7,085 in the years ended December 31, 2003, 2002 and 2001, respectively.

A. Revolving Credit Agreement – On February 17, 2000, the Company entered into a Revolving Credit Agreement under which the Company could borrow up to \$75,000 in revolving credit (the Senior Revolver) of this amount, up to \$50,000 may be borrowed in euro currency. On December 29, 2000, the lenders under the Senior Revolver consented to the transfer of \$11,737 of borrowings (at December 31, 2001 exchange rates) to their correspondent bank in Germany and issued a payment guarantee relating thereto. The euro currency borrowings bear interest based upon prevailing LIBOR rates (plus applicable margin), while borrowings in U.S. dollars bear interest based upon prevailing prime or LIBOR rates (plus applicable margin.) The average interest rate as of December 31, 2003 and December 31, 2002 was 5.03% and 5.09%, respectively.

Pursuant to a Waiver and Amendment to the Senior Revolver dated January 18, 2002, the maturity was extended from March 31, 2002 to January 1, 2004 and the commitment was reduced to \$60,000 with further reductions scheduled on December 1, 2002 to \$53,000 and on June 30, 2003 to \$49,000. The amount utilized under the senior credit agreement was \$48,569 as of December 31, 2003.

The loan agreements require the Company to comply with certain covenants such as maintaining minimum financial ratios and tangible net worth. Certain covenants also limit the payment of dividends and repurchase of common stock. The Company agreed to pledge as collateral to its lenders domestic accounts receivable, inventory, property, plant and equipment and stock in certain subsidiaries. As of December 31, 2003, the Company is in full compliance with all financial covenants.

In March 2004, the Company entered into a new three-year \$65,000 financing arrangement with a consortium of banks from the U.S. and Europe. Proceeds from the new financing arrangement were used to repay in full the Revolving Credit Agreement and Term Loans. The new financing arrangement provides for \$40,000 of borrowing in the U.S., including a \$15,000 term loan ("U.S. Term Loan") and up to \$25,000 of revolving credit ("U.S. Revolver") and \$25,000 of borrowing in Europe, including a \$20,000 term loan ("European Term Loan") and up to \$5,000 of revolving credit ("European Revolver"). Borrowings under the new arrangement are collateralized by substantially all of the Company's U.S. and European assets. The U.S. borrowings are denominated in U.S. Dollars and bear interest at prevailing prime or LIBOR rates, plus an applicable margin. The European borrowings are denominated in Euros and British Pound Sterling and bear interest based upon prevailing LIBOR rates, plus an applicable margin. As required by the new financing arrangement, the Company will enter into interest rate hedges. The U.S. Term Loan and European Term Loan each require quarterly repayments of \$500. Availability under the U.S. Revolver and European Revolver is based primarily on eligible accounts receivable and inventory. Total initial unused availability under the U.S. and European Revolvers was \$2,029 and \$500, respectively.

Since the existing Revolving Credit Agreement and Term Loans were refinanced with long-term indebtedness, they are classified as long-term, net of the current portion of the new financing arrangement, in the accompanying Consolidated Balance Sheets.

- B. Senior Subordinated Notes – On January 18, 2002, the Company issued \$25 million of Senior Subordinated Notes (the Notes) with detachable warrants to purchase 7.5% of the fully diluted common stock of the Company at a nominal exercise price. The warrants are effective for a period of ten years. The warrant holders have the right to put the warrants or common stock received from exercise of the warrants, to the Company at the earlier of the fifth anniversary date, or upon the occurrence of other events, such as a change of control of the Company. The Company has the right to call the warrants or, common stock issued from exercise of the warrants, at the end of the sixth year from the closing date. The put and call shall be at a price equal to the greater of the fair market value, as determined by an independent appraiser, market value, or book value. The Notes bear interest at 14% per annum, of which 12% is payable monthly and 2% is deferred and accreted to the principal balance until the fifth anniversary date. After the fifth anniversary date, interest is payable at 14% through maturity. The deferred interest accreted to the Notes at December 31, 2003 and 2002 was \$993 and \$479, respectively. Upon issuance, the Notes were recorded net of a discount of \$4,467 which represents the fair value of the warrants on January 18, 2002. The discount is being amortized into interest expense over the remaining term of the Notes. As of December 31, 2003 and 2002, the unamortized discount was \$3,301 and \$3,899, respectively. Beginning with the seventh anniversary date, the Notes become payable in two equal annual payments. The Notes are subordinate to collateral pledged under the Company's existing Senior Debt. The warrant holders have the right to sell the warrants or common stock received from exercise of the warrants to the Company at fair market value beginning on the fifth anniversary date or earlier under certain circumstances. Approximately \$20,900 from the proceeds of the Notes were used to repay Senior Debt, term loans, and an industrial revenue bond, with the remaining amount used for working capital and transaction costs. The Notes carry financial covenant requirements similar to the Revolving Credit Agreement. As of December 31, 2003, the Company is in full compliance with the financial covenant requirements of the Notes.
- C. Term Loans – On January 18, 2002, the Company refinanced two facilities with one of the lenders under the Senior Revolver. The refinancing, among other things, converted the then outstanding borrowings of \$8,335 to terms loans (the "Term Loans"), with all principal becoming due in March 2004 and the lender was granted a second priority interest in the collateral provided under the Senior Revolver. The Term Loans were repaid in full with the proceeds of a new financing arrangement in March 2004.
- D. Convertible Subordinated Notes - In January 2000, the Company acquired Bencyn, Inc. and an associated real estate holding company for approximately \$13,809. The purchase consideration included \$2,400 in cash, 458,650 shares of the Company's common stock and the value of put options on the Company's common stock. The put options, upon exercise by the sellers, require the Company to repurchase shares of stock from the sellers at minimum prices. Under these options, the Company could be required to purchase up to \$2,000 of stock per year from May 15, 2001 through May 15, 2004, not to exceed \$4,300 in the aggregate during the period. The purchases are to be made at minimum prices equal to the greater of the Company's annual common stock valuation or prices increasing each year from \$24.00 per share to \$30.00 per share. As of December 31, 2003, \$4,150 of such puts have been exercised, of which the Company paid \$500 in cash and issued notes for the remaining \$3,650. Further, on May 15, 2005, the Company may be required to purchase up to 50% of the then remaining shares held by the sellers for a price equal to the greater of the Company's common stock valuation or \$32.00 per share. The Company's estimated minimum potential purchase obligation on the May 15, 2005 put is \$4,800.

In the event that the exercise of the put options for cash would cause the Company to violate any of its debt covenants, the options allow the Company to issue convertible subordinated notes in lieu of cash. The convertible subordinated notes allow the holder to convert the notes back into such number of shares of common stock of the Company as were originally surrendered upon exercise of the put option. The notes bear interest at either 12% or 9% depending on the seller involved or the date of issuance. If not converted into common stock, the notes become due and payable on the earlier of April 20, 2008 or April 30, 2010, subject to such payment not violating senior credit agreements.

6. STOCK PURCHASE PLANS

Pursuant to the Key Employee Stock Purchase Plan adopted by the Company in 1987 and the Outside Director Stock Purchase Plan adopted in 1992, participating eligible employees (as determined by the Board of Directors) of the Company and its subsidiaries and participating outside directors (as determined by the Executive Committee of the Board of Directors) are provided the opportunity to purchase stock of the Company. Each participant may purchase, within ten days of the offer, shares of stock at the fair market value, as determined by the Company's independent appraisal firm, on the date the offer is made.

No shares were issued under the plans during 2001, 2002 or 2003. At December 31, 2003, 81,379 shares of common treasury stock are reserved for issuance under the Key Employee Stock Purchase Plan and 81,000 shares are reserved under the Outside Directors Stock Purchase Plan.

7. STOCK OPTION PLANS

The Company maintains various stock incentive plans that have been approved by the shareholders to attract, retain and motivate key employees and non-employee directors. The Equity Compensation Plan (the "1993 Plan") provides for the grant of stock options, stock appreciation rights and/or restricted stock to certain key employees and non-employee directors of the Company. Another Stock Option Plan created in 1990 for Key Employees and Directors, which provides for the grant of non-qualified stock options and/or stock appreciation rights.

Under the plans, the option period may not exceed 10 years (in the case of incentive stock options, not more than five years for individuals who own more than 10% of the voting power of the Company's stock at the date of grant). The options granted under the plans may be exercised, subject to cumulative annual limits not exceeding 25%, beginning with the date of grant or first anniversary thereafter. Options under the 1993 Plan may be exercised at not less than 100% of the fair market value (as determined by the Company's independent appraisal firm) of the Company's stock at the date the option was granted (in the case of incentive stock options, at not less than 110% of the fair market value for individuals who own more than 10% of the voting power of the Company's stock at the date of grant.) Options under the 1990 Plan may be exercised at not less than 50% of the fair market value of the Company's stock at the date the option was granted. Options granted, exercised and expired during 2003, 2002 and 2001 are summarized as follows:

	Shares	Stock Options Price Range Per Share	Weighted Average Price
Outstanding, January 1, 2001	415,771	\$15.00 - \$23.00	\$17.97
Granted	—	—	—
Exercised	(6,666)	15.00	15.00
Forfeited	<u>(42,694)</u>	15.00 - 23.00	18.64
Outstanding, December 31, 2001	366,411	\$15.00 - 23.00	\$17.95
Granted	—	—	—
Exercised	—	—	—
Forfeited	<u>(5,000)</u>	17.00	17.00
Outstanding, December 31, 2002	361,411	\$15.00 - \$23.00	\$17.96
Granted	238,999	15.00	15.00
Exercised	—	—	—
Forfeited	<u>(151,073)</u>	15.00 - 23.00	16.02
Outstanding, December 31, 2003	<u>449,337</u>	\$15.00 - \$23.00	\$17.04
			Weighted Average Remaining Contractual Life in Years
Range of Exercise Prices	Number of Shares Outstanding	Exercisable	
\$15.00	238,999	—	10.0
17.00	97,900	73,425	7.0
18.70	5,000	3,750	2.0
20.00	52,150	52,150	2.0
23.00	<u>55,288</u>	<u>55,288</u>	3.5
	<u>449,337</u>	<u>184,613</u>	7.5

As of December 31, 2003, 2002 and 2001, respectively, there were 221,593, 70,520 and 65,520 shares of common treasury stock available for grants under the 1993 Plan and 661,001, 900,000 and 900,000 shares available for grants under the 1990 Plan. As of December 31, 2003, 2002 and 2001, 184,613, 294,783 and 259,391 options were exercisable at weighted average exercise prices of \$19.68, \$18.21, and \$18.42, respectively.

Had compensation cost for stock options been determined consistent with SFAS No. 123, "Accounting for Stock-Based Compensation," the Company's pro forma net income (loss) and basic earnings (loss) per share would have been: \$1,611 and \$0.38, respectively, for the year ended December 31, 2003; \$(1,801) and \$(0.42), respectively, for the year ended December 31, 2002 and \$2,010 and \$0.46, respectively, for the year ended December 31, 2001. In accordance with the requirements of SFAS 123, this method of accounting has not been applied to options granted prior to the fiscal year beginning January 1, 1995. The resulting pro forma compensation cost may not be representative of that to be expected in future years.

The fair value of each stock option grant is estimated on the date of grant of \$3.00 in 2003 and \$4.69 in 2000 using the Black-Scholes option pricing model with volatility assumed to be zero and the following weighted average assumptions used for grants: risk-free interest rates of 3.77% (2003) and 5.26% (2000), expected dividend yields of 0.00% (2003) and 1.35% (2000) and expected lives of seven years (2003) and ten years (2000).

8. DEFERRED COMPENSATION

Deferred compensation consists primarily of government mandated severance payments in certain foreign countries and retirement benefits for the former owners of certain foreign companies acquired in 1992.

9. EMPLOYEE PENSION PLANS

The Company sponsors a defined contribution plan that provides substantially all domestic salaried and domestic hourly employees an opportunity to accumulate funds for their retirement. The Company may make discretionary matching contributions to the plan in the form of Company common stock. During 2003, the Company matched a percentage of participant contributions with common stock valued at \$300. The Company did not provide a matching contribution in 2002 or 2001.

The Company has defined benefit pension plans covering substantially all U.S. salaried and hourly employees (hereafter "domestic plans") as well as certain employees in Canada, United Kingdom, and Germany (hereafter "foreign plans.") The domestic plans provide benefits based on an employee's years of service and compensation received for the highest five consecutive years of earnings. The foreign plans provide benefits based on a formula of years of service and a percentage of compensation which varies among the foreign plans. Pension expenses as presented for years ended December 31, 2003, 2002 and 2001 and funded status is presented as of December 31, 2003 and 2002, respectively. The Company's funding policy is consistent with funding requirements of applicable government laws and regulations.

Periodic pension expense (income) is as follows:

	Year Ended December 31					
	2003		2002		2001	
	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign
Net Pension Expense (Income):						
Actual (return) loss on net assets	\$(5,472)	\$(4,388)	\$3,160	\$4,832	\$(106)	\$4,209
Service cost-benefits earned during period	975	616	887	927	796	1,053
Interest cost on projected benefit obligation	1,695	2,645	1,674	2,292	1,549	2,144
Net amortization and deferral	3,568	1,889	(5,492)	(7,443)	(2,337)	(7,125)
Employee contribution	—	—	—	(391)	—	(382)
Gain on curtailment	—	—	—	—	(42)	—
Recognized actuarial (gain) loss	178	667	—	89	(159)	—
	<u>\$ 944</u>	<u>\$1,429</u>	<u>\$ 229</u>	<u>\$ 306</u>	<u>\$(299)</u>	<u>\$(101)</u>

A reconciliation of the funded status of the Company's defined benefit plans to amounts recognized in the Consolidated Balance Sheets is as follows:

	2003		2002	
	Domestic	Foreign	Domestic	Foreign
Fair value of plan assets	\$26,581	\$41,624	\$22,665	\$33,091
Projected benefit obligation	(28,407)	(54,260)	(25,616)	(44,150)
Funded status	(1,826)	(12,636)	(2,951)	(11,059)
Unrecognized (gain) loss from past experience	3,354	15,162	5,407	14,671
Unrecognized transition obligation (asset)	(167)	(68)	(205)	(119)
Unrecognized prior service cost	689	332	743	346
Net amount recognized	<u>\$2,050</u>	<u>\$2,790</u>	<u>\$2,994</u>	<u>\$3,839</u>

Amounts recognized in the Consolidated Balance Sheets are as follows:

Prepaid benefit cost	\$2,050	—	\$2,994	—
Accrued benefit liability	—	\$(6,760)	—	\$(6,186)
Intangible asset	—	332	—	346
Accumulated other comprehensive loss	—	9,218	—	9,679
	<u>\$2,050</u>	<u>\$2,790</u>	<u>\$2,994</u>	<u>\$3,839</u>

Significant actuarial assumptions used to calculate projected benefit obligations and periodic pension expense are as follows, foreign amounts are weighted averages:

	2003		2002	
	Domestic	Foreign	Domestic	Foreign
Discount rate	6.25%	5.57%	7.0%	5.80%
Rate of return on assets	9.00%	7.25%	9.0%	7.25%
Salary growth	3.75%	3.76%	4.0%	3.76%

At December 31, 2003, certain foreign plans' accumulated benefit obligation exceeded the fair value of the respective plan assets. The total of such accumulated benefit obligation, projected benefit obligation and fair value of plan assets, was \$47,088, \$52,949 and \$41,470, respectively.

At December 31, 2002, each foreign plan's accumulated benefit obligation exceeded the fair value of the respective plan assets. The total of such accumulated benefit obligation, projected benefit obligation and fair value of plan assets was \$36,968, \$44,150 and \$33,091, respectively.

10. INCOME TAXES

The provision for income taxes is summarized as follows:

	Year Ended December 31		
	2003	2002	2001
Current:			
U.S. Federal	\$ 42	\$ —	\$(1,497)
U.S. State	—	156	68
Foreign	3,301	1,762	1,060
Total current	3,343	1,918	(369)
Deferred	475	(1,286)	1,777
Total	<u>\$ 3,818</u>	<u>\$ 632</u>	<u>\$ 1,408</u>

Effective Tax Rate

Income tax expense attributable to income from continuing operations differed from the amounts computed by applying the U.S. federal income tax rate of 34% to pretax income from operations as set forth in the following table:

	Year Ended December 31		
	2003	2002	2001
Tax at statutory rate	\$1,867	\$(369)	\$1,197
Tax effect of permanent differences	647	566	3,039
State tax expense (benefit), net of federal benefit	(502)	245	45
Foreign tax credits	(115)	(130)	(4)
Adjustment to the deferred tax asset valuation allowance	1,979	32	(3,089)
International rate differences	(629)	—	488
Change in enacted tax rates	184	—	—
Other	387	288	194
Total	<u>\$3,818</u>	<u>\$ 632</u>	<u>\$1,408</u>

As of December 31, 2003, the Company had federal, state and foreign net operating loss carry forwards of \$58,673. Of these tax loss carryforwards, \$490 expire in 2004, \$426 expire in 2005, \$446 expire in 2006, \$757 expire in 2007, \$741 expire in 2008, \$33,588 expire in 2009 through 2023 and \$22,225 may be carried forward indefinitely.

Deferred income taxes arise due to certain items being includable in the determination of taxable income in periods different than for financial reporting purposes. The tax effect of significant types of temporary differences and carryforwards that gave rise to the Company's deferred tax assets and liabilities as of December 31, 2003 and 2002 follows:

	<u>2003</u>	<u>2002</u>
Deferred Tax Assets:		
Accrued expenses	\$1,399	\$1,150
Deferred revenue	—	118
Inventory	38	81
Accrued pensions	2,826	2,770
Tax loss carryforwards	13,478	10,321
Foreign tax credit carryforwards	1,614	1,377
Other	<u>401</u>	<u>173</u>
Gross deferred tax assets	19,756	15,990
Valuation allowance	<u>(11,188)</u>	<u>(7,034)</u>
	<u>8,568</u>	<u>8,956</u>
Deferred Tax Liabilities:		
Fixed assets	(3,619)	(1,049)
Prepaid pensions	(750)	(1,146)
Other	<u>(1,127)</u>	<u>(3,111)</u>
	<u>(5,496)</u>	<u>(5,306)</u>
Net deferred tax assets	<u>\$3,072</u>	<u>\$3,650</u>

At December 31, 2003 and 2002, the valuation allowance related primarily to U.S. state and foreign tax loss carryforwards.

The Company intends to make distributions from its wholly-owned subsidiary in Hong Kong of earnings that have been previously taxed in the U.S. and can be distributed without any additional taxes. With the exception of the Hong Kong subsidiary, U.S. income taxes have not been provided on the undistributed earnings (aggregating approximately \$42,587 and \$37,674 at December 31, 2003 and 2002, respectively) of the Company's foreign subsidiaries because such earnings are intended to be reinvested indefinitely. Future investment requirements in the respective non-U.S. jurisdictions are in excess of the undistributed foreign earnings. The determination of the unrecorded deferred tax liability with respect to undistributed foreign earnings was not practicable; however, any such U.S. tax liability would be substantially offset by U.S. foreign tax credits or tax loss carryforwards.

Income taxes paid were \$2,775, \$1,517, and \$2,276 for the years ended December 31, 2003, 2002 and 2001, respectively.

11. FUTURE MINIMUM RENTAL PAYMENTS

The future minimum rental payments required under operating leases that have initial or remaining noncancellable lease terms in excess of one year as of December 31, 2002 are as follows:

2004	\$2,710
2005	2,100
2006	1,125
2007	690
2008	393
2009 and thereafter	<u>—</u>
Total	<u>\$7,018</u>

Rent expense for 2003, 2002 and 2001 on operating leases aggregated \$3,439, \$3,285 and \$3,303, respectively.

12. COMMITMENTS AND CONTINGENCIES

The Company participates in certain payments in connection with Environmental Protection Agency consent orders related to certain hazardous waste cleanup activities under the federal Superfund statute. Cleanup activities at a Superfund site in which the Company is participating are in the final phase, which includes ongoing activities such as treatment of soil vapor extraction, biodegradation of contaminated subsurface soils and groundwater monitoring at the site. As of December 31, 2003 and 2002, the Company had accrued \$434 and \$729, respectively, for these activities. During 2003, 2002 and 2001, the Company paid \$84, \$90 and \$92, respectively, on Superfund activities. Additionally, there are various claims and pending actions against the Company and its subsidiaries arising out of the normal conduct of its business. While the outcome of these matters is currently not determinable, the Company's management does not believe that the resolution of these matters will have a material adverse impact on the Company's consolidated financial position, results of operations or cash flows.

At December 31, 2003 the Company had letters of credit outstanding totaling \$125 which guarantee performance of certain trade activities. As of December 31, 2003, the Company does not have any significant commitments or guarantees that are not reflected in the accompanying financial statements or disclosed in the notes thereto.

13. FINANCIAL INSTRUMENTS AND CONCENTRATIONS OF CREDIT RISK

Credit risk represents the accounting loss that would be recognized at the reporting date if counterparties failed completely to perform as contracted. Concentrations of credit risk (whether on or off balance sheet) that arise from financial instruments exist for groups of customers or counterparties when they have similar economic characteristics that would cause their ability to meet contractual obligations to be similarly affected by changes in economic or other conditions. Financial instruments with potential credit risk include cash and cash equivalents, an interest rate hedge agreement and accounts receivable.

The Company maintains cash and cash equivalents with various major financial institutions. Concentrations of credit risk with respect to receivables are generally limited due to the Company's large number of customers and their dispersion across many countries and industries. At December 31, 2003 and 2002, the Company had no significant concentrations of credit risk.

The Company has entered into interest rate hedge agreements to change the fixed/variable interest rate mix of its debt portfolio thereby reducing the Company's aggregate risk to movements in interest rates. By using such derivative financial instruments to hedge exposures to changes in interest rates, the Company exposes itself to credit risk and market risk. Credit risk for these agreements is the risk that the counterparty might fail to fulfill its performance obligations under the terms of the derivative contract. Market risk is the risk that the value of a financial instrument might be adversely affected by a change in interest rates.

At December 31, 2003, the Company had the following interest rate hedge agreement in effect under which it is reimbursed the excess of a variable rate above a stated maximum rate and is responsible for payment of the excess of a variable rate below a stated minimum rate:

Interest Hedge	Expiration Date	Notional Amount	Maximum Rate	Minimum Rate
US 3 month LIBOR	January 2004	\$16,000	6.00%	5.30%

The following disclosure of the estimated fair value of financial instruments is made in accordance with SFAS No. 107, "Disclosures about Fair Value of Financial Instruments." The estimated fair value amounts have been determined by the Company using available market information and appropriate valuation methodologies.

For short-term debt and long-term debt the rates currently available to the Company for debt with similar terms and remaining maturities are used to estimate the fair value for debt outstanding. At December 31, 2003 the fair value of such debt instruments approximates the carrying value.

The fair value of interest rate hedge agreements as of December 31, 2003 and 2002 was \$0 and \$(762), respectively. In July 2001, a European interest rate hedge agreement with a notional amount of approximately \$16,550 at December 31, 2001 exchange rates was closed out for a pretax gain of \$480. In August 1999, a domestic interest rate hedge agreement with a notional amount of \$25,000 was closed out for a pretax gain of \$1,413. The gains are being amortized as a reduction of interest expense over the remaining years of the agreements, respectively, \$459, \$485 and \$407 were credited against interest expense in 2003, 2002 and 2001. As of December 31, 2003 and 2002, respectively, the unamortized gain, net of taxes, was \$54 and \$329.

14. RESTRUCTURING AND OTHER OPERATING EXPENSES

Restructuring and other operating expenses consists of the following:

	Year End December 31		
	2003	2002	2001
Restructuring charges:			
Severance costs	\$1,471	\$1,149	\$3,015
Facility closing costs	312	446	—
Total restructuring charges	\$1,783	\$1,595	\$3,015
Costs of obtaining and developing computer software for internal use	—	—	396
Asset impairments	—	1,174	—
	<u>\$1,783</u>	<u>\$2,769</u>	<u>\$3,411</u>

Restructuring charges reflect streamlining and operational capacity realignments primarily in the U.S. and Europe resulting in the elimination of 75, 44 and 83 employee positions during 2003, 2002 and 2001, respectively, through primarily involuntary severance programs. At December 31, 2003, 2002 and 2001, respectively, \$277, \$269 and \$800 of severance related costs remained unpaid. The unpaid severance costs as of December 31, 2003 are expected to be fully paid by October 2004. Facility closing costs include costs incurred to idle various facilities. Asset impairments reflect a loss of \$674 on a building no longer in use and a loss of \$500 on a facility disposed in 2003. The costs of computer software for internal use relate to an enterprise information systems project in the U.S. This project was accounted for in accordance with American Institute of Certified Public Accountants Statement of Position 98-1 whereby certain costs incurred during the application development stage were capitalized while costs incurred during the preliminary project and post-implementation stages and all costs for training and data conversion were charged to expense as incurred.

REPORT OF INDEPENDENT AUDITORS

To the Board of Directors and Stockholders of Houghton International Inc.

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations, comprehensive loss, changes in stockholders' equity and of cash flows present fairly, in all material respects, the financial position of Houghton International Inc. and its subsidiaries at December 31, 2003 and December 31, 2002, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2003 in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

As discussed in Note 1, the Company adopted a new financial accounting standard for goodwill during 2002.

PricewaterhouseCoopers LLP

Philadelphia, PA
March 29, 2004

DIRECTORS AND OFFICERS

CORPORATE OFFICERS

William F. MacDonald, Jr.
Chief Executive Officer

Daniel W. Fisher
Vice President - Houghton FLUIDCARE

Joseph G. Wintsch
Vice President - Sales

Thad L. Piatkowski
President - Houghton Metal Finishing

Rosauro V. Holgado
Vice President - Technical Service

Dr. Joseph F. Warchol
Vice President - Technical

William J. Streich
Vice President - Finance, Secretary/Treasurer

Jay C. Rohr
Controller

BOARD OF DIRECTORS

The following listing reflects board composition as of March 31, 2004

John D. Brennan
Business Development Consultant

Charles P. Connolly, Jr.
*Retired President and CEO,
First Union National Bank
Pennsylvania and Delaware*

Theodore G. Kauffman
Private Investor

William F. MacDonald, Jr.
Chairman of the Board and CEO

David W. Moser
*President
DFT Incorporated*

W. Lloyd Snyder III
*Principal, Snyder and Company
Chairman of the Board,
Huff Paper Company*

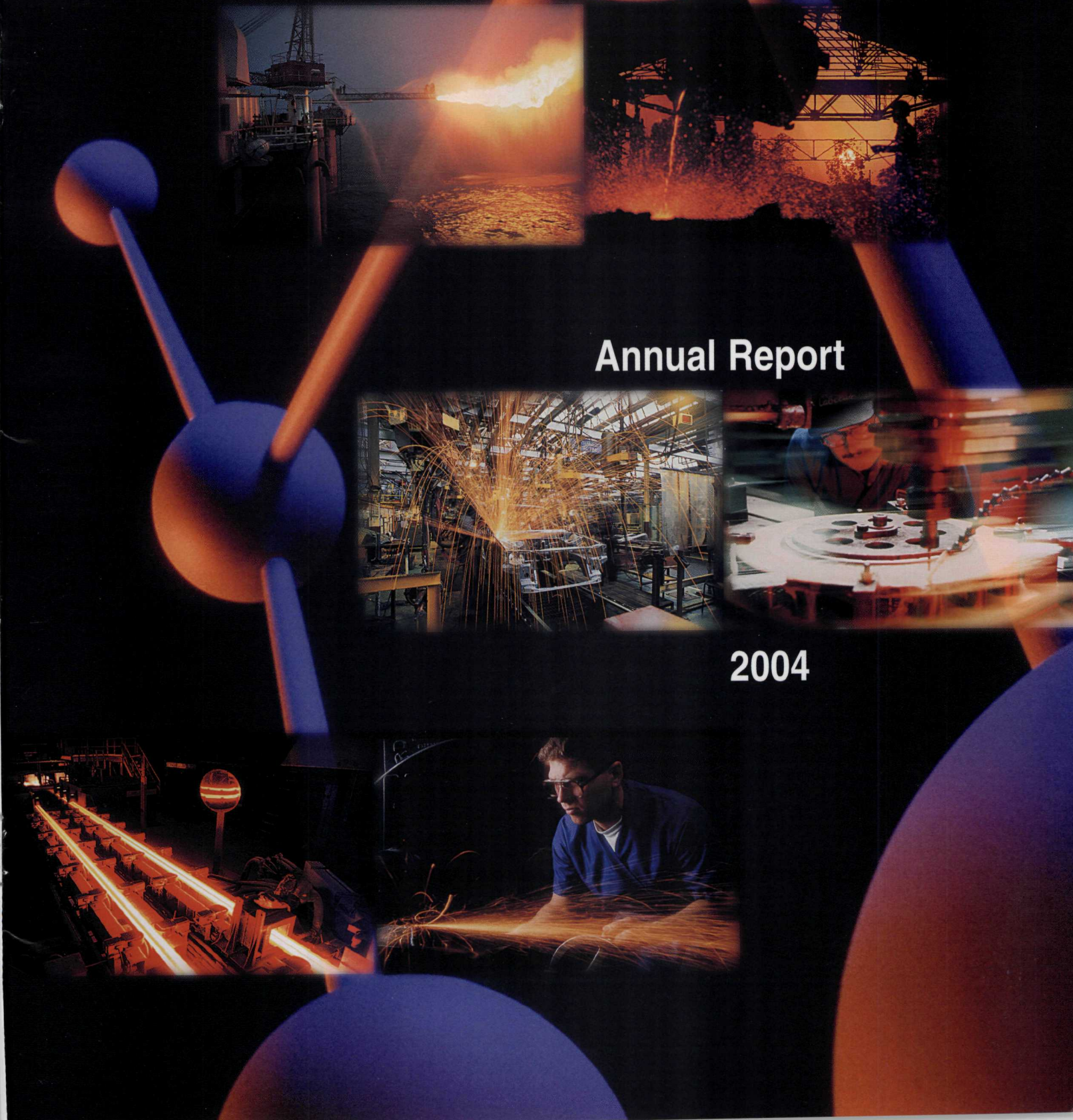


Houghton International Inc.
P.O. Box 930, Valley Forge, PA 19482-0930
(610) 666-4000

HOUGHTON INTERNATIONAL INC.

Annual Report

2004



North American Sales Offices and Plants

ALLENTOWN
6681 Snowdrift Road
Allentown, PA 18106

CARROLLTON
421 Garrett Street
Carrollton, GA 30117

CHICAGO
6600 S. Nashville Avenue
Chicago, IL 60638

FORT WORTH
4734 Highway 377 S., Suite 20
Fort Worth, TX 76116

LAFAYETTE
3150 S. Country Road 460 East
Lafayette, IN 47901

TROY
5750 New King Street, Suite 350
Troy, MI 48098

HOUGHTON FLUIDCARE
Bank One Tower, Suite 710
201 Main Street
Lafayette, IN 47901

HOUGHTON METAL FINISHING
1055 Windward Ridge Parkway
Suite 140
Alpharetta, GA 30005

HOUGHTON OFFSHORE
10375 Richmond Avenue, Suite 1105
Houston, TX 77042

HOUGHTON CANADA
100 Symes Road
Toronto M6P 3J5, Ontario

Worldwide

AUSTRALIA
Houghton Australia Pty. Ltd.

BRAZIL
Houghton Brasil LTDA

CHINA
Houghton (China) Co. Ltd.

DENMARK
Houghton Danmark A/S

FRANCE
Houghton S.A.S.

GERMANY
Houghton Deutschland GmbH

HONG KONG
Houghton Asia Pacific Co. Ltd.

IRELAND
Houghton Oils & Chemicals
(Ireland) Ltd.

ITALY
Houghton Italia S.p.A.

JAPAN
Houghton Japan Co. Ltd.

KOREA
Korea Houghton Corporation

MEXICO
Especialidades Quimicas
Monterrey S.A.

THE NETHERLANDS
Houghton Benelux BV

NORWAY
Houghton Norge A.S.

POLAND
Houghton Polska SP.Z.O.O.

ROMANIA
Houghton Romania S.R.L.

SINGAPORE
Houghton Singapore

SPAIN
Houghton Iberica S.A.

SWEDEN
Houghton Sverige AB

SWITZERLAND
Houghton (Schweiz) AG

TAIWAN
Houghton Taiwan Co. Ltd.

THAILAND
Thai Houghton 1993 Co. Ltd.

TURKEY
Houghton Kimya Sanayi A.S.

UNITED KINGDOM
Houghton plc

HOUGHTON'S MISSION

To be the World Leader in the management of chemical processes through strategic partnerships with clients and suppliers to maximize shareholder value.

FINANCIAL HIGHLIGHTS

(Dollars in thousands except per share amounts)

	2004	2003	2002
For the year			
Sales	\$398,072	\$343,154	\$311,567
Operating Income	16,686	12,762	9,302
Net income (loss) before cumulative effect of a change in accounting principle	3,611	1,673	(1,718)
Per common share			
Earnings (loss) per share before cumulative effect of a change in accounting principle	\$0.86	\$0.40	\$(0.40)
At year end			
Total assets	\$265,248	\$240,933	\$224,161
Shareholders' equity	73,580	72,131	59,923

Houghton International Inc. is a global supplier of industrial fluids and chemical management services, primarily for the metalworking industry. Founded in 1865, the Company completed its 139th year in 2004.

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Report of Independent Auditors	28
Directors and Officers	IBC

Houghton's Commitment to Health, Safety and the Environment

Product Stewardship

We will counsel our employees and customers in the safe and proper handling, recycling, use and disposal of Houghton products. We will maintain appropriate health, safety and environmental information on all new and existing products.



Responsible Product Development

The health and well-being of our employees and customers will continue to be a major consideration in the development of our products.



Protection of the Environment

Houghton will continue to develop products and systems which safeguard the environment and conserve our natural resources.



Public Awareness

We will make available through training material and seminars all pertinent information on the safe handling and use of our products to our employees, customers and the public.



Management Commitment

All levels of Houghton management are actively involved in promoting our commitment to protecting the environment and the health and safety of our employees, customers and the communities in which we operate.

On behalf of the Houghton Organization,

William F. MacDonald Jr.

President

TO OUR SHAREHOLDERS:

Houghton International had a solid year of progress in 2004. Our Net Sales increased 16% to a record level of \$398 million. Our Operating Profit improved 31% to \$16.7 million. We also made good progress on strengthening our balance sheet by closing on our bank financing agreement, steadily paying down our level of debt and continuing to increase our cash flow.

We realized these improved results through the combined efforts of our worldwide team. While business conditions in the manufacturing environment improved somewhat, particularly in North America, we also had to contend with steadily increasing costs for our raw materials. Our revenue increases reflect gains in market share, increased customer demand and a decline in the value of the dollar which increases the value of our sales in non-dollar currencies. At the same time, our ability to maintain our margins reflects some hard bargaining by our purchasing team around the world and equally hard negotiating by our sales and marketing teams with our customer base, who are not particularly keen on receiving price increases. Congratulations are due to all for a job well done in a challenging environment.

In the United States, Joe Wintsch, Vice President-Sales and Marketing, kept up the pressure on our Technical Representatives to seek out and realize new business opportunities. *This program succeeded and most of our Representatives produced outstanding results.* Hank Limper again led the Marketing team by spreading the usage of Hocut 795 far and wide. Overall, we had a broad and deep improvement in all product lines, in many geographies and across many industries. To make the President's Council of our top ten Representatives required outstanding performance indeed. Thanks to all for a great effort.

Houghton Fluidcare also enjoyed a solid year, renewed several large contracts and picked up important new ones that will help our growth in 2005. We are spreading our engineering and fluids management expertise to a broad customer base and capitalizing upon our growing experience in improving our customers' operations. Houghton Metal Finishing grew strongly in sales and profitability. This is a niche business for us, but one in which we are world leaders and increasing

our market share. Houghton Canada works closely with our U. S. operations and mirrored the domestic U.S. results, though with some loss of margin due to their product mix. We gained some important new business late in the year that will help our performance in Canada in 2005.

Conditions in Europe proved somewhat more challenging due to continued sluggish activity in much of the region. Paul Miller is spending more of his time and effort on unifying our European operations into one organization. Josep Mestre is leading our purchasing and production program, Alain Galliaud our marketing program, and Fiorenzo Bucelli our technical development. Mark Bishop, our European Financial Director, is progressively tightening our financial controls and reporting requirements. Our results in each country varied based on the underlying strength of each economy but on the whole our results met forecast, but not without hard work. We are continuing our re-engineering and cost optimization processes and are not waiting for a strong economic upturn. Some of our newer ventures, such as Houghton Polska, showed significant progress and represent a real growth opportunity. Krzysztof Lorenz and Mirek Kania are building an able, enthusiastic team that is producing great results. More businesses are expanding into Eastern Europe lured by lower costs and an eager workforce. This trend is sure to continue.

Houghton Australia built upon its work of the previous year and showed nicely improved results while Houghton Thailand just kept marching upward. While we suffered there during the Asian crisis of the late 90's into 2000, the economic recovery and resumption of growth has proven the value of our investment there. In Japan, we were still somewhat in transition to our new, more aggressive marketing initiative under Yoichi Yamauchi, but the signs are positive. Sales momentum is increasing both in Japan and with Japanese industry throughout the world.

In China, we had another strong year led by C. Y. Lai. We have to work hard to keep up with our growth and note that we garnered the chemical management business for all of China for both General Motors and Volkswagen in the last six months. We have also won lots of business in aluminum and steel rolling, hydraulic fluids, heat

treating and wire drawing. Our new Shanghai plant is nearly complete and just in time to support our major growth in the Chinese marketplace. The incredible growth in that economy has been well reported. We are making sure that we participate, but on a financially stable and profitable basis.

Houghton Korea performed well in 2004 while Houghton Brazil showed fine growth in sales but some squeeze in profitability as it invested in some infrastructure to handle new business opportunities.

Overall, the Company further improved its operating profitability while continuing to pay down debt on a systematic basis. The amount of debt repayment is somewhat obscured by the dollar's devaluation against other currencies which has the effect of increasing the dollar value of debt on the books of our subsidiaries in other currencies. Still, we paid down more debt than planned, and we used the proceeds from some small sales of redundant real estate to further pay down debt. We financed the working capital requirement for our large growth from operating cash flow and close management of working capital throughout the world. Bill Streich and the financial team led a company wide focus on cash flow to improve our financial position and financial ratios.

I want to draw your attention to one change in our financial reporting requirements. Effective January 1, 2004, we were required to adopt Statement of Financial Accounting Standards ("SFAS") No. 150 "Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity." This standard resulted in a change in the way we account for changes in the value of the warrants issued in connection with the placement of our subordinated debt in early 2002. The fair value of the warrants has increased along with the fair value of the Common Stock over the three year period. The change in accounting standards requires us to record the fair value of the warrants as a liability and the three year increase in fair value of the warrants within current year earnings. The results of this change are reflected in the consolidated financial statements and further described in footnote 15.

Last year we were able to facilitate a Tender Offer to existing shareholders through a small group of outside investors. This transaction was successfully consummated in January of 2005 as

previously reported in the closing letter circulated to all shareholders in my January letter. Our Board of Directors and management are pleased that we have been able to offer at least some degree of liquidity to our shareholders while we continue to improve our sales, profitability and financial position. Our next task on the financial front is to refinance our high cost subordinated debt, a process that is now underway and which we hope to conclude around mid-year. We will then examine with our creditors when we will be in a position to restore a modest dividend payment and/or stock repurchase program.

Hempstead & Co. has again analyzed our year-end financial results to determine the value of Houghton International Inc. common stock for transactions involving the Company's 401K Plan. They have concluded that the value of a share of Houghton International Inc. common stock for these transactions as of December 31, 2004 is \$21.00. This valuation takes into account the dilution from the issue of warrants with the placement of our subordinated debt issue early in 2002. Please note and recognize that this valuation is only determined for this specific purpose. As a privately held company, the Company's stock held outside the 401K Plan has very limited liquidity and is subject to the agreement of buyers and sellers on a mutually satisfactory price for any transaction. We recognize that liquidity continues to be a concern for many shareholders and we will continue to explore opportunities to address shareholder liquidity in the context of the Company's overall long-term business objectives.

This prompts me to reflect upon our evolution as a Company over the last five years. By the year 2000, we recognized that our markets were changing and that we would have to change our corporate strategy to respond to these changes if we were to continue to grow and prosper. We, therefore, adopted a new mission and set about redirecting our corporate resources. We also started a long process of re-engineering our entire corporation in part due to our new strategy, but also due to the sale of our paper chemicals business in 1998, which left us with overcapacity in certain areas. This initiative gained even more urgency from the long decline in our major markets from 2000-2002. The result of all of the above developments was sub-par financial performance for several years in spite of all our re-engineering.

Please note, however, that we did not stop investing in new products, new markets, new geographies or our new strategic direction. We have been determined to succeed with our product, market and geographic development, in the opportunity offered by our new strategy and in the ultimate recovery of our markets. While the time for us to produce the results we expected certainly took a lot longer than any of us anticipated, Houghton has emerged stronger than ever. We are *outperforming most of our competitors* and are gaining market share in most of our markets. Our Fluidcare business has grown from being a small player in chemical management to being clearly the biggest and best in this field. We have the market position and resources that are necessary to maintain our leadership. Our products and our sales and marketing team around the world are second to none and winning an increasing share of the marketplace.

Our organization today is capable, experienced, and with a lot of depth with well trained and ambitious management talent. In short, we have every reason to be confident in our ability to confront whatever challenges we may face. We still have ample opportunity to improve and to grow within the broad worldwide marketplace in which we operate. Company morale is high as is the momentum of our business development. We have an increasingly strong and stable base of business upon which to expand. We have every reason to be optimistic that we will produce further improved results in 2005.

Sincerely,



William F. MacDonald, Jr.
Chairman of the Board

CONSOLIDATED BALANCE SHEETS

December 31, 2004 and 2003

(Dollars in thousands except share and per share amounts)

ASSETS	<u>2004</u>	<u>2003</u>
CURRENT ASSETS:		
Cash, restricted cash and cash equivalents	\$ 12,709	\$ 14,192
Trade receivables (less allowance for doubtful accounts - 2004, \$2,877; 2003, \$2,825)	90,898	73,748
Inventories	43,985	37,234
Other current assets	<u>4,802</u>	<u>8,737</u>
Total current assets	<u>152,394</u>	<u>133,911</u>
INVESTMENTS AND ADVANCES:		
Equity affiliates	<u>11,651</u>	<u>9,374</u>
PROPERTY, PLANT AND EQUIPMENT:		
Land and buildings	54,956	52,508
Machinery and equipment	99,648	92,247
Construction in progress	<u>1,875</u>	<u>933</u>
Total	156,479	145,688
Accumulated depreciation	<u>(102,118)</u>	<u>(91,224)</u>
Total property, plant and equipment, net	<u>54,361</u>	<u>54,464</u>
OTHER ASSETS:		
Goodwill	35,190	33,794
Prepaid pension costs	—	2,050
Deferred income taxes (Note 10)	4,505	3,096
Other assets	<u>7,147</u>	<u>4,244</u>
Total other assets	<u>46,842</u>	<u>43,184</u>
 TOTAL	 <u>\$265,248</u>	 <u>\$240,933</u>

See notes to consolidated financial statements.

LIABILITIES AND STOCKHOLDERS' EQUITY	2004	2003
CURRENT LIABILITIES:		
Short-term debt (Note 4)	\$ 10,203	\$ 7,735
Current portion of long-term debt (Note 5)	5,706	5,741
Accounts payable	54,163	41,963
Accrued compensation and other	13,879	14,217
Income taxes payable	1,599	1,424
Total current liabilities	85,550	71,080
LONG-TERM DEBT (Note 5)	82,546	85,553
OTHER LIABILITIES:		
Deferred compensation	3,669	3,429
Accrued pension	7,887	6,607
Redemption value of warrants (Note 15)	8,039	—
Deferred income taxes (Note 10)	2,175	436
Minority interests and other	1,802	1,697
Total other liabilities	23,572	12,169
COMMITMENTS AND CONTINGENCIES (Note 12)		
STOCKHOLDERS' EQUITY:		
Capital stock - par value, \$.050 a share:		
Noncumulative 6% voting preferred, call price \$0.53 a share - authorized 500,000 shares	—	—
Common stock - par value, \$ 0.50 a share: authorized 25,000,000; issued 10,613,600 shares; outstanding 2004 - 4,213,591 shares, 2003 - 4,172,512 shares	5,307	5,307
Additional paid-in capital	18,539	22,870
Retained earnings	124,916	123,728
Accumulated other comprehensive loss	(3,073)	(7,707)
Total	145,689	144,198
Treasury stock, at cost (2004: 6,400,009 shares; 2003: 6,441,088 shares)	(72,109)	(72,067)
Total stockholders' equity	73,580	72,131
TOTAL	\$265,248	\$240,933

CONSOLIDATED STATEMENTS OF OPERATIONS

(Dollars in thousands, except per share amounts)

	Year ended December 31		
	<u>2004</u>	<u>2003</u>	<u>2002</u>
NET SALES	\$398,072	\$343,154	\$311,567
Cost of goods sold	<u>282,873</u>	<u>242,535</u>	<u>219,298</u>
GROSS PROFIT	115,199	100,619	92,269
Selling, general and administrative expenses	97,916	86,074	80,198
Restructuring and other operating expenses (Note 14)	<u>597</u>	<u>1,783</u>	<u>2,769</u>
OPERATING INCOME	<u>16,686</u>	<u>12,762</u>	<u>9,302</u>
OTHER INCOME (EXPENSE), NET:			
Interest expense, net	(8,824)	(8,443)	(8,944)
Gain (loss) on business disposal (Note 3)	—	(454)	(1,419)
Other income (expense), net	511	1,626	(25)
Warrant appreciation (Note 15)	<u>(1,148)</u>	<u>—</u>	<u>—</u>
Total other expense	<u>(9,461)</u>	<u>(7,271)</u>	<u>(10,388)</u>
INCOME (LOSS) BEFORE INCOME TAXES	7,225	5,491	(1,086)
Provision for income taxes	<u>3,614</u>	<u>3,818</u>	<u>632</u>
NET INCOME (LOSS) BEFORE CUMULATIVE EFFECT OF A CHANGE IN ACCOUNTING PRINCIPLE	\$3,611	\$1,673	\$(1,718)
Cumulative effect of a change in accounting principle (Note 15)	<u>(2,423)</u>	<u>—</u>	<u>—</u>
Net income (loss) after cumulative effect of a change in accounting principle	<u>\$1,188</u>	<u>\$1,673</u>	<u>\$(1,718)</u>
BASIC EARNINGS (LOSS) PER SHARE OF COMMON STOCK:			
Income before cumulative effect of a change in accounting principle	\$0.86	\$0.40	\$(0.40)
Cumulative effect of a change in accounting principle	(0.58)	—	—
Income after cumulative effect of a change in accounting principle	<u>\$0.28</u>	<u>\$0.40</u>	<u>\$(0.40)</u>
Diluted Earnings (loss) per share of common stock:			
Income before cumulative effect of a change in accounting principle	\$0.84	\$0.37	\$(0.40)
Cumulative effect of a change in accounting principle	(0.56)	—	—
Income after cumulative effect of a change in accounting principle	<u>\$0.28</u>	<u>\$0.37</u>	<u>\$(0.40)</u>

CONSOLIDATED STATEMENTS OF CASH FLOWS

(Dollars in thousands)

	Year ended December 31		
	2004	2003	2002
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net income (loss)	\$ 1,188	\$ 1,673	\$(1,718)
Adjustments to reconcile net income to net cash provided by operating activities:			
Cumulative effect of a change in accounting principle	2,423	—	—
Change in fair value of warrants	1,148	—	—
Depreciation and amortization	7,950	7,465	7,349
Debt issuance cost amortization	1,246	734	659
Loss (gain) on disposal of property, plant and equipment	164	(1,582)	(335)
Loss on business disposal	—	454	1,419
Asset impairments	—	—	1,174
Equity in net income of affiliates	(741)	(1,128)	(947)
Pension expense	2,126	2,373	535
Non-cash interest and amortization on senior subordinated notes	1,123	1,113	1,047
Deferred income taxes	(432)	1,055	(528)
Changes in current assets and liabilities:			
Accounts receivable	(15,731)	(29)	3,474
Inventories	(9,725)	1,633	(829)
Prepaid expenses and other assets	6,934	5,597	(796)
Accounts payable	11,445	(4,599)	(4,462)
Accrued expenses and other liabilities	1,385	(5,162)	3,076
Net cash provided by operating activities	10,503	9,597	9,118
CASH FLOWS FROM INVESTING ACTIVITIES:			
Purchases of property, plant and equipment	(5,207)	(6,469)	(4,549)
Proceeds from disposal of property, plant and equipment	1,508	2,674	1,350
Proceeds from business disposal	—	—	7,102
Net cash provided by (used in) investing activities	(3,699)	(3,795)	3,903
CASH FLOWS FROM FINANCING ACTIVITIES:			
Net proceeds (payments) of short-term debt	1,781	1,735	(2,148)
Net proceeds (purchases) of treasury stock	216	(88)	(663)
Net payments of long-term debt	(6,891)	(2,603)	(3,018)
Debt issuance costs	(3,637)	(741)	(1,674)
Net cash used in financing activities	(8,531)	(1,697)	(7,503)
EFFECT OF EXCHANGE RATE CHANGES ON CASH	244	(1,301)	(2,157)
NET (DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS	(1,483)	2,804	3,361
CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR	14,192	11,388	8,027
CASH AND CASH EQUIVALENTS AT END OF YEAR	\$12,709	\$14,192	\$11,388

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY

(Dollars in thousands, except per share amounts)

	Common Stock	Additional Paid-In-Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Treasury Amount	Stock Shares
Balance at January 1, 2002	\$5,307	\$18,366	\$123,773	\$(18,521)	\$(67,666)	6,267,837
Net loss	—	—	(1,718)	—	—	—
Common share purchases	—	—	—	—	(163)	9,499
Issuance of convertible subordinated notes	—	—	—	—	(3,000)	118,590
Issuance of detachable warrants	—	4,467	—	—	—	—
Stock purchase plan activity	—	29	—	—	—	—
Other comprehensive loss	—	—	—	(951)	—	—
Balance at December 31, 2002	\$5,307	\$22,862	\$122,055	\$(19,472)	\$(70,829)	6,395,926
Net income	—	—	1,673	—	—	—
Common share purchases	—	—	—	—	(96)	6,291
Issuance of convertible subordinated notes	—	—	—	—	(1,150)	41,071
Stock purchase plan activity	—	8	—	—	8	(2,200)
Other comprehensive income	—	—	—	11,765	—	—
Balance at December 31, 2003	\$5,307	\$22,870	\$123,728	\$ (7,707)	\$(72,067)	6,441,088
Net income	—	—	1,188	—	—	—
Common share purchases	—	—	—	—	(84)	4,488
Issuance of convertible subordinated notes	—	—	—	—	(150)	5,000
Reclassify warrants (Note 15)	—	(4,467)	—	—	—	—
Stock purchase plan activity	—	(101)	—	—	129	(33,900)
Contribution to 401(K) Plan	—	237	—	—	63	(16,667)
Other comprehensive income	—	—	—	4,634	—	—
Balance at December 31, 2004	\$5,307	\$18,539	\$124,916	\$(3,073)	\$(72,109)	6,400,009

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

(Dollars in thousands)

	Year ended December 31		
	2004	2003	2002
Net income (loss)	\$1,188	\$1,673	\$(1,718)
Other comprehensive income (loss):			
Foreign currency translation adjustment	6,094	10,505	5,403
Minimum pension liability adjustment (net of taxes of \$(772) in 2004 and \$489 in 2003 and \$(2,770) in 2002)	(1,424)	1,078	(6,079)
Net changes in derivatives designated as cash flow hedges (net of taxes of \$(33) in 2004 and \$121 in 2003 and \$(184) in 2002)	(36)	182	(275)
Total other comprehensive income (loss)	4,634	11,765	(951)
Comprehensive income (loss)	\$5,822	\$13,438	\$(2,669)

See notes to consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(Dollars in thousands, except share and per share amounts)

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. Business – Houghton International Inc. is a global supplier of industrial fluids and chemical management services, primarily for the metalworking industry. The principal markets for Houghton International Inc.'s products and services are the Americas, Europe and Asia.

B. Principles of Consolidation and Basis of Presentation – The consolidated financial statements include Houghton International Inc. and all majority owned and controlled subsidiaries (the Company) and, on an equity basis, 50% owned affiliates. All significant intercompany transactions and balances have been eliminated.

Total assets, liabilities and net income of equity affiliates amounted to \$53,555, \$30,581, and \$2,039, respectively, in 2004 and \$40,619, \$21,809, and \$2,488, respectively, in 2003.

Effective January 1, 2004, the Company adopted the revised interpretation of Financial Accounting Standards Board ("FASB") Interpretation No. 46 ("FIN 46-R"), *Consolidation of Variable Interest Entities*. FIN 46-R requires that certain variable interest entities be consolidated by the primary beneficiary of the entity if the investors in the entity do not have the characteristics of a controlling financial interest or do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support from other parties. The Company has assessed all entities and relationships within the scope of FIN 46-R that were created after December 31, 2003, and has determined that it does not have any investments in variable interest entities for which the Company is the primary beneficiary. The Company is not required to assess entities and relationships established prior to December 31, 2003 until its 2005 fiscal year. The Company has not completed its assessment of these entities and relationships.

C. Revenue Recognition - Sales are generally recognized when services are rendered or products are shipped, at which time title and risk of loss passes to the customer.

D. Shipping and Handling - The Company reports shipping and handling revenues as sales and the related cost as cost of goods sold.

E. Inventories – A portion of domestic inventories are recorded using the last-in, first-out (LIFO) cost method. Such LIFO amounts represent 71% and 69% of the applicable 2004 and 2003 domestic inventories prior to the LIFO adjustment, respectively. If the first-in, first-out (FIFO) method of inventory valuation had been used for all inventories by the Company, inventories would have been \$7,392 and \$7,915 higher at December 31, 2004 and 2003, respectively. During 2002, 2003 and 2004, inventory quantities were reduced, causing a liquidation of LIFO reserves. The liquidations reduced cost of goods sold by \$484 in 2004, \$457 in 2003 and \$395 in 2002. Other inventories are carried at the lower of cost or market, cost being determined by FIFO method. The Company's total inventory, net of LIFO and obsolescence reserves, consists of the following:

	December 31	
	2004	2003
Raw materials	\$16,186	\$13,215
Work in process	499	458
Finished goods	27,300	23,561
Total	<u>\$43,985</u>	<u>\$37,234</u>

F. Property, Plant and Equipment – Property, plant and equipment are stated at cost. Property, plant and equipment are generally depreciated over the estimated useful lives of the assets on a straight-line basis. Significant expenditures which extend the useful lives of existing assets are

capitalized. Maintenance and repair costs are charged to current earnings. Depreciation expense, including depreciation on assets under capital leases, was \$7,950, \$7,465 and \$7,349 for the years ended December 31, 2004, 2003 and 2002, respectively. The cost of assets and related accumulated depreciation is removed from the accounts when such assets are disposed of, and any related gains or losses are reflected in current income.

- G. Goodwill – Effective January 1, 2002, the Company adopted Statement of Financial Accounting Standards (SFAS) No. 142, "Goodwill and Other Intangible Assets." SFAS No. 142 requires goodwill to be tested for impairment on an annual basis and between annual tests in certain circumstances, and written down when impaired, rather than being amortized as previous accounting standards required. In accordance with SFAS No. 142, the Company ceased amortizing goodwill as of January 1, 2002. Based upon impairment tests performed at the transition date of January 1, 2002 and the testing dates of December 31, 2004, December 31, 2003 and November 30, 2002, there was no impairment of goodwill in 2004, 2003 or 2002.
- H. Earnings Per Share of Common Stock – Basic and diluted earnings per share are computed using the weighted average number of shares of common stock outstanding. Common equivalent shares from convertible securities are included in the diluted computation when their effect is dilutive.
- I. Cash, Restricted Cash and Cash Equivalents – Cash and cash equivalents represent cash in banks and short-term investments having an original maturity of less than three months. Certain cash balances exceed Federal Deposit Insurance Corporation limits. Restricted cash of \$250 and \$850 at December 31, 2004 and December 31, 2003, respectively, represents amounts restricted statutorily in certain foreign countries for retirement benefits and a capital project.
- J. Foreign Currency Translation – The accounts of non-U.S. subsidiaries and affiliates are measured using local currency as the functional currency. For those operations, assets and liabilities are translated into U.S. dollars at year end exchange rates. Income and expense amounts are translated at the average exchange rates prevailing during the year. Net gains or losses resulting from such translation are accumulated in other comprehensive income (loss) within stockholders' equity. Gains and losses from foreign currency transactions are included in other income. For the years ended December 31, 2004, 2003 and 2002, such net gains (losses) were \$(49), \$(540), and \$392, respectively.
- K. Income Taxes – The Company accounts for income taxes under the asset and liability method in accordance with Statement of SFAS No. 109, "Accounting for Income Taxes."
- L. Environmental Expenditures – Environmental expenditures that relate to current or future revenues are expensed or capitalized as appropriate. Expenditures that relate to an existing condition caused by past operations, and do not contribute to current or future revenue generation, are expensed. Liabilities are recorded when environmental assessments and/or clean-ups are probable, and the costs can be reasonably estimated. Generally, the timing of these accruals coincides with the commitment to a formal plan of action.
- M. Long-Lived Assets and Assets Held for Sale – Effective January 1, 2002, the Company adopted SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets." SFAS No. 144 requires long-lived assets be tested for recoverability whenever events or changes in circumstances indicate that carrying values may not be recoverable. An impairment loss shall be recognized if the carrying amount of a long-lived asset is not recoverable and exceeds the fair value of the asset. The standard also establishes criteria to determine when long-lived assets are to be classified as "held for sale."

N. Estimates – The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results may differ from those estimates and assumptions.

O. Derivatives and Hedging Activities – The Company accounts for derivatives in accordance with SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities," as amended by SFAS No. 138 "Accounting for Certain Derivative Instruments and Certain Hedging Activities", which requires that such derivatives be recognized at fair value.

Currently, the Company enters into derivative contracts to hedge exposures of interest rates (cash flow hedges). The changes in fair value of a derivative that is designated and qualifies as a cash flow hedge, to the extent that the hedge is effective, is recorded in other comprehensive income as a component of Stockholders' Equity. Any hedge ineffectiveness (which represents the amount by which the changes in the fair value of the derivative exceed the variability in the cash flows of the forecasted transaction) is recorded in current-period earnings. When it is determined that a derivative is no longer effective as a hedge, the Company discontinues hedge accounting prospectively. All derivatives are recognized in the accompanying Consolidated Balance Sheets at fair value.

P. Stock-Based Compensation: The Company accounts for incentive and nonqualified stock option plans in accordance with Accounting Principles Board Opinion No. 25, under which compensation cost is recognized based on the difference, if any, between the appraised fair value of the Company's stock at the time of option grant and the amount the employee must pay to acquire the stock. The Company's options have been issued at fair market value at the time of grant.

Q. Recent Accounting Pronouncements: In October 2004, Congress passed the American Jobs Creation Act of 2004 (the "Jobs Creation Act"). The Jobs Creation Act includes numerous provisions that may affect business practices and accounting for income taxes. For companies that pay U.S. income taxes on manufacturing activities in the U.S., The Jobs Creation Act provides a phased-in deduction from taxable income equal to a stipulated percentage of qualified income from domestic production activities. The Jobs Creation Act also provides for a change in the period of application for foreign tax credits against Alternative Minimum Tax, expanded disallowance of interest on convertible debt and tax shelter disclosure penalties. In December 2004, the FASB issued two FASB Staff Positions ("FSP") regarding the accounting implications of the Act related to (1) the deduction for qualified domestic productions activities ("FSP 109-1"), and (2) the one-time tax benefit for the repatriation of foreign earnings ("FSP 109-2"). This guidance applies to financial statements for periods ending after the date the Jobs Creation Act was enacted. The impact on the Jobs Creation Act and related FASB pronouncements on the Company's financial position, results of operations and cash flows is still being evaluated.

In November 2004, the FASB issued SFAS No. 151, "Inventory Costs - an Amendment of ARB No. 43, Chapter 4". This standard provides clarification that abnormal amounts of idle facility expense, freight, handling costs, and spoilage should be recognized as current-period charges. Additionally, this standard requires that allocation of fixed production overheads to the cost of conversion be based on the normal capacity of the production facilities. The provisions of this standard are effective for inventory costs incurred during fiscal years beginning after June 15, 2005. The Company is currently evaluating the impact of this standard on its financial position, results of operations and cash flows.

On December 15, 2004, the FASB issued SFAS No. 153, "Exchanges of Nonmonetary Assets - an amendment of Accounting Principles Board Opinion No. 29, Accounting for Nonmonetary Transactions (APB 29)". SFAS 153 is based on the principle that nonmonetary asset exchanges

should be recorded and measured at the fair value of the assets exchanged, with certain exceptions. This standard requires exchanges of productive assets to be accounted for at fair value, rather than at carryover basis, unless (1) neither the asset received nor the asset surrendered has a fair value that is determinable within reasonable limits or (2) the transactions lack commercial substance (as defined). SFAS 153 is effective for nonmonetary asset exchanges occurring in fiscal periods beginning after June 15, 2005. The Company does not expect this standard to have a material impact of its financial position, results of operations and cash flows.

On December 16, 2004, the FASB issued Statement of Financial Accounting Standards No. 123(R), *Share-Based Payment Compensation* ("FAS 123(R)"). FAS 123(R) revised FASB Statement No. 123, *Share-Based Compensation* ("FAS 123") and requires companies to expense the fair value of employee stock options and other forms of stock-based compensation. FAS 123(R) must be adopted by the Company as of the beginning of the first interim or annual reporting period beginning after December 15, 2005. The Company is currently assessing the impact this pronouncement will have on their financial position, results of operations and cash flows.

R. Reclassifications - Certain reclassifications have been made to conform prior years' balances to current year presentations.

2. EARNINGS (LOSS) PER SHARE

The following table sets forth a reconciliation of the numerator and denominator for the basic and diluted earnings (loss) per share calculations for this periods indicated:

	Year ended December 31		
	2004	2003	2002
Numerator:			
Income (loss) before cumulative effect of a change in accounting principle	\$3,611	\$1,673	\$(1,718)
Cumulative effect of a change in accounting principle	(2,423)	—	—
Net income (loss) available to common shareholders	<u>\$1,188</u>	<u>\$1,673</u>	<u>\$(1,718)</u>
Denominator:			
Weighted average shares - basic	4,186,376	4,193,953	4,255,692
Effect of dilutive warrants and employee stock options	<u>100,449</u>	<u>389,351</u>	<u>—</u>
Weighted average shares - diluted	<u>4,286,825</u>	<u>4,583,304</u>	<u>4,255,692</u>

The following securities and their equivalent shares of common stock were not included in the computation of diluted earnings per share because they were anti-dilutive for the periods presented:

	Year ended December 31		
	2004	2003	2002
Employee stock options	55,288	112,438	361,411
Warrants, detachable from senior subordinated notes	—	—	382,815
Convertible subordinated notes	<u>164,661</u>	<u>159,661</u>	<u>118,590</u>
Total	<u>219,949</u>	<u>272,099</u>	<u>862,816</u>

3. BUSINESS DISPOSALS

On July 31, 2001, the Company sold Durferri GmbH, a German subsidiary, for approximately \$16,100 of which \$8,100 was paid at closing, \$7,200 was due in 2002 and the remainder was due in equal installments of \$400 in 2003 and 2004. The installments due in 2002, 2003 and 2004 were contingent upon Durferri GmbH achieving certain operational standards subsequent to the sale. During 2002, it became apparent that Durferri GmbH would not achieve such operating standards. Accordingly, the Company reached an agreement with the buyer whereby the 2002 installment was reduced by \$1,000 and the 2003 installment of \$400 was eliminated. As a result, in 2002, the Company recorded a loss on business disposal of \$1,419. During 2003, German tax authorities levied assessments against the buyer for certain tax structures in place at the time of the sale. Accordingly, during 2003, the Company reserved \$454 additional loss on the Durferri sale, as an estimate of the total due the buyer for reimbursement of the tax assessments. During 2004, the Company and the buyer settled all remaining known claims with no additional cost to the Company.

During 1998, the Company sold its worldwide paper chemicals business to Hercules Incorporated. As part of the agreement of sale, the Company entered into a know-how sharing agreement and a transition product and services agreement, and agreed not to compete against Hercules. These agreements required the Company to provide certain training and support and not to directly compete in the paper chemicals business against Hercules for a period not to exceed five years. In accordance with the terms of the agreements, the Company received five annual installments of \$2,000 beginning October 1998 through October 2002. These payments were recognized as income over the annual period of April to March. The final \$500 of such income was recognized during the first quarter of 2003.

4. SHORT-TERM DEBT

Short-term debt consists of borrowings under bank lines of credit and discounting facilities bearing interest at various rates. As of December 31, 2004 and 2003, such borrowings totaled \$10,203 and \$7,735, respectively. The unused portion of these facilities at December 31, 2004 and 2003 totaled \$14,386 and \$10,547, respectively. One of the credit lines is collateralized by machinery and equipment with a net book value of approximately \$0 and \$257 as of December 31, 2004 and 2003, respectively. The discounting facilities are collateralized by underlying accounts receivable and the bank lines of credit are uncollateralized.

5. LONG-TERM DEBT

Long-term debt is comprised of the following:

	December 31	
	2004	2003
Senior credit agreement	\$57,471	\$48,444
Senior subordinated notes, net of discount	23,816	22,693
Term loans	—	9,418
Convertible subordinated notes	3,800	3,650
Obligations under capital leases	2,050	1,319
Other notes payable	1,115	5,770
Total	88,252	91,294
Current portion	(5,706)	(5,741)
Long-term debt	<u>\$82,546</u>	<u>\$85,553</u>

Fixed maturities of the Company's debt are as follows:

2005	\$ 5,706
2006	6,393
2007	48,074
2008	271
2009	13,946
2010 and thereafter	<u>13,862</u>
Total	<u>\$88,252</u>

The Company's management believes that the combination of cash on hand, cash generated by operations and, if necessary, additional borrowing under the current credit agreement will be sufficient to satisfy the Company's operating cash requirements in the short-term and long-term.

Interest paid was \$7,674, \$8,198, and \$9,226 in the years ended December 31, 2004, 2003 and 2002, respectively.

A. Senior Credit Agreement – In March 2004, the Company entered into a three-year \$65,000 financing arrangement with a consortium of banks from the U.S. and Europe. Proceeds of \$59,000 from the financing arrangement were used to repay existing debt of \$58,683. The financing arrangement provides for \$40,000 of borrowing in the U.S., including a \$15,000 term loan ("U.S. Term Loan") and up to \$25,000 of revolving credit ("U.S. Revolver") and \$25,000 of borrowing in Europe, including a \$20,000 term loan ("European Term Loan") and up to \$5,000 of revolving credit ("European Revolver"). Borrowings under the arrangement are collateralized by substantially all of the Company's U.S. and European assets. The U.S. borrowings are denominated in U.S. Dollars and bear interest at prevailing prime or LIBOR rates, plus an applicable margin. The European borrowings are denominated in Euros and British Pound Sterling and bear interest based upon prevailing LIBOR rates, plus an applicable margin. As required by the financing arrangement, the Company has entered into interest rate hedges (see Note 13). The U.S. Term Loan and European Term Loan each require quarterly repayments of \$500 during the first two years of the arrangement and \$750 per quarter during the third year. Availability under the U.S. Revolver and European Revolver is based primarily on eligible accounts receivable and inventory. At December 31, 2004, the unused availability under the U.S. and European Revolvers was \$6,000 and \$452, respectively. Fees on the unused portion are 0.5%. The average interest rate on the Senior Credit Agreement was 5.33% at December 31, 2004.

The Senior Credit Agreement requires the Company to comply with certain covenants such as maintaining minimum financial ratios and tangible net worth. Certain covenants also limit the payment of dividends and repurchase of common stock. The Company agreed to pledge as collateral to its lenders accounts receivable, inventory, property, plant and equipment and stock in certain subsidiaries. As of December 31, 2004, the Company is in full compliance with all financial covenants.

On February 17, 2000, the Company entered into a Revolving Credit Agreement under which the Company could borrow up to \$75,000 in revolving credit (the Senior Revolver) of this amount, up to \$50,000 may be borrowed in euro currency. Pursuant to a Waiver and Amendment to the Senior Revolver dated January 18, 2002, the maturity was extended from March 31, 2002 to January 1, 2004 and the commitment was reduced to \$60,000 with further reductions scheduled on December 1, 2002 to \$53,000 and on June 30, 2003 to \$49,000. The amount utilized under the Revolving Credit Agreement was \$48,569 as of December 31, 2003. The average interest rate on the Revolving Credit Agreement was 5.03% as of December 31, 2003. The Revolving Credit Agreement was repaid in full with the proceeds of the Senior Credit Agreement in March, 2004.

- B. Senior Subordinated Notes – On January 18, 2002, the Company issued \$25 million of Senior Subordinated Notes (the Notes) with detachable warrants to purchase 7.5% of the fully diluted common stock of the Company at a nominal exercise price. The warrants are effective for a period of ten years. The warrant holders have the right to put the warrants or common stock received from exercise of the warrants, to the Company at the earlier of the fifth anniversary date, or upon the occurrence of other events, such as a change of control of the Company. The Company has the right to call the warrants or, common stock issued from exercise of the warrants, at the end of the sixth year from the closing date. The put and call shall be at a price equal to the greater of the fair market value, as determined by an independent appraiser, market value, or book value. The Notes bear interest at 14% per annum, of which 12% is payable monthly and 2% is deferred and accreted to the principal balance until the fifth anniversary date. After the fifth anniversary date, interest is payable at 14% through maturity. The deferred interest accreted to the Notes at December 31, 2004 and 2003 was \$1,518 and \$993, respectively. Upon issuance, the Notes were recorded net of a discount of \$4,467 which represents the fair value of the warrants on January 18, 2002. The discount is being amortized into interest expense over the remaining term of the Notes. As of December 31, 2004 and 2003, the unamortized discount was \$2,702 and \$3,301, respectively. Beginning with the seventh anniversary date, the Notes become payable in two equal annual payments. The Notes are subordinate to collateral pledged under the Company's existing Senior Credit Agreement. The warrant holders have the right to sell the warrants or common stock received from exercise of the warrants to the Company at fair market value beginning on the fifth anniversary date or earlier under certain circumstances. Approximately \$20,900 from the proceeds of the Notes were used to repay Senior Debt, term loans, and an industrial revenue bond, with the remaining amount used for working capital and transaction costs. The Notes carry financial covenant requirements similar to the Senior Credit Agreement. As of December 31, 2004, the Company is in full compliance with the financial covenant requirements of the Notes.
- C. Term Loans – On January 18, 2002, the Company refinanced two facilities with one of the lenders under the Senior Revolver. The refinancing, among other things, converted the then outstanding borrowings of \$8,335 to terms loans (the "Term Loans"), with all principal becoming due in March 2004 and the lender was granted a second priority interest in the collateral provided under the Senior Revolver. These Term Loans were repaid in full with the proceeds of the Senior Credit Agreement.
- D. Convertible Subordinated Notes - In January 2000, the Company acquired Bencyn, Inc. and an associated real estate holding company for approximately \$13,809. The purchase consideration included \$2,400 in cash, 458,650 shares of the Company's common stock and the value of put options on the Company's common stock. The put options, upon exercise by the sellers, require the Company to repurchase shares of stock from the sellers at minimum prices. Under these options, the Company could be required to purchase up to \$2,000 of stock per year from May 15, 2001 through May 15, 2004, not to exceed \$4,300 in the aggregate during the period. The purchases are to be made at minimum prices equal to the greater of the Company's annual common stock valuation or prices increasing each year from \$24.00 per share to \$30.00 per share. As of December 31, 2004, \$4,300 of such puts have been exercised, of which the Company paid \$500 in cash and issued notes for the remaining \$3,800. Further, on May 15, 2005, the Company may be required to purchase up to 50% of the then remaining shares held by the sellers for a price equal to the greater of the Company's common stock valuation or \$32.00 per share. The Company's estimated minimum potential purchase obligation on the May 15, 2005 put is \$4,700.

In the event that the exercise of the put options for cash would cause the Company to violate any of its debt covenants, the options allow the Company to issue convertible subordinated notes in lieu of cash. The convertible subordinated notes allow the holder to convert the notes back into such number of shares of common stock of the Company as were originally surrendered upon exercise of the put option. The notes bear interest at 12%. If not converted into common stock, the

notes become due and payable on the earlier of April 20, 2008 or April 30, 2010, subject to such payment not violating senior credit agreements.

6. STOCK PURCHASE PLANS

Pursuant to the Key Employee Stock Purchase Plan adopted by the Company in 1987 and the Outside Director Stock Purchase Plan adopted in 1992, participating eligible employees (as determined by the Board of Directors) of the Company and its subsidiaries and participating outside directors (as determined by the Executive Committee of the Board of Directors) are provided the opportunity to purchase stock of the Company. Each participant may purchase shares of stock at the fair market value, as determined by the Company's independent appraisal firm. In order to facilitate such purchases, the Company will make loans to participants. The loans require repayments over various periods, up to five years, and bear interest at prevailing market rates. Such loans are recorded as a reduction of Stockholders' Equity in the accompanying Consolidated Balance Sheets.

No shares were issued under the plans during 2002. During 2004 and 2003, 33,900 and 2,200 shares were issued, respectively. Outstanding loans on purchases of such shares amounted to \$523 and \$38 as of December 31, 2004 and December 31, 2003, respectively. At December 31, 2004, 52,779 shares of common treasury stock are reserved for issuance under the Key Employee Stock Purchase Plan and 73,500 shares are reserved under the Outside Directors Stock Purchase Plan.

7. STOCK OPTION PLANS

The Company maintains various stock incentive plans that have been approved by the shareholders to attract, retain and motivate key employees and non-employee directors. The Equity Compensation Plan (the "1993 Plan") provides for the grant of stock options, stock appreciation rights and/or restricted stock to certain key employees and non-employee directors of the Company. Another Stock Option Plan for Key Employees and Directors (the 1990 Plan), which provides for the grant of non-qualified stock options and/or stock appreciation rights.

Under the plans, the option period may not exceed 10 years (in the case of incentive stock options, not more than five years for individuals who own more than 10% of the voting power of the Company's stock at the date of grant). The options granted under the plans may be exercised, subject to cumulative annual limits not exceeding 25%, beginning with the date of grant or first anniversary thereafter. Options under the 1993 Plan may be exercised at not less than 100% of the fair market value (as determined by the Company's independent appraisal firm) of the Company's stock at the date the option was granted (in the case of incentive stock options, at not less than 110% of the fair market value for individuals who own more than 10% of the voting power of the Company's stock at the date of grant.) Options under the 1990 Plan may be exercised at not less than 50% of the fair market value of the Company's stock at the date the option was granted. Options granted, exercised and expired during 2004, 2003 and 2002 are summarized as follows:

	Shares	Stock Options Price Range Per Share	Weighted Average Price
Outstanding, January 1, 2002	366,411	\$15.00 - 23.00	\$17.95
Granted	—	—	—
Exercised	—	—	—
Forfeited	(5,000)	17.00	17.00
Outstanding, December 31, 2002	361,411	\$15.00 - \$23.00	\$17.96
Granted	238,999	15.00	15.00
Exercised	—	—	—
Forfeited	(151,073)	15.00 - 23.00	16.02
Outstanding, December 31, 2003	449,337	\$15.00 - \$23.00	\$17.04
Granted	164,999	\$15.00	\$15.00
Exercised	—	—	—
Forfeited	(18,833)	15.00 - 20.00	16.41
Outstanding, December 31, 2004	<u>595,503</u>	\$15.00 - 23.00	\$16.50
Range of Exercise Prices	Number of Shares		Weighted Average Remaining Contractual Life in Years
\$15.00	<u>Outstanding</u>	<u>Exercisable</u>	
15.00	394,665	121,916	9.3
17.00	90,900	90,900	6.0
18.70	5,000	5,000	1.0
20.00	49,650	49,650	1.0
23.00	<u>55,288</u>	<u>55,288</u>	2.5
	<u>595,503</u>	<u>322,754</u>	7.4

As of December 31, 2004, 2003 and 2002, respectively, there were 231,093, 221,593, and 70,520 shares of common treasury stock available for grants under the 1993 Plan and 505,335, 661,001 and 900,000 shares available for grants under the 1990 Plan. As of December 31, 2004, 2003 and 2002, 322,754, 184,613 and 294,783 options were exercisable at weighted average exercise prices of \$17.76, \$19.68, and \$18.21, respectively.

Had compensation cost for stock options been determined consistent with SFAS No. 123, "Accounting for Stock-Based Compensation," the Company's pro forma net income (loss) and basic earnings (loss) per share before a cumulative effect of change of accounting principle would have been: \$3,432 and \$0.82, respectively, for the year ended December 31, 2004; \$1,611 and \$0.38, respectively, for the year ended December 31, 2003; \$(1,801) and \$(0.42), respectively, for the year ended December 31, 2002.

The fair value of each stock option grant is estimated on the date of grant to be \$5.30 and \$5.60 in 2004, \$3.00 in 2003 and \$4.69 in 2000 using the Black-Scholes option pricing model with volatility assumed to be zero and the following weighted average assumptions used for grants: risk-free interest rates of 3.94% (2004), 3.77% (2003) and 5.26% (2000), expected dividend yields of 0.00% (2004 and 2003) and 1.35% (2000) and expected lives of 6.25 years (2004), 7.0 years (2004 and 2003) and 10.0 years (2000).

8. DEFERRED COMPENSATION

Deferred compensation consists primarily of government mandated severance payments in certain foreign countries and retirement benefits for the former owners of certain foreign companies acquired in 1992.

9. EMPLOYEE PENSION PLANS

The Company sponsors a defined contribution plan that provides substantially all domestic salaried and domestic hourly employees an opportunity to accumulate funds for their retirement. The Company may make discretionary matching contributions to the plan in the form of Company common stock. The Company matched a percentage of participant contributions with common stock valued at \$336 and \$300 during 2004 and 2003, respectively. The Company did not provide a matching contribution in 2002.

The Company has defined benefit pension plans covering substantially all U.S. salaried and hourly employees (hereafter "domestic plans") as well as certain employees in Canada, the United Kingdom, the Netherlands, Taiwan and Germany (hereafter "foreign plans.") The domestic plans provide benefits based on an employee's years of service and compensation received for the highest five consecutive years of earnings. The foreign plans provide benefits based on a formula of years of service and a percentage of compensation which varies among the foreign plans. Pension expenses are presented for years ended December 31, 2004, 2003 and 2002 and funded status is presented as of December 31, 2004 and 2003, respectively. The Company's funding policy is consistent with funding requirements of applicable government laws and regulations.

Periodic pension expense (income) is as follows:

	Year Ended December 31					
	2004		2003		2002	
	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign
Net Pension Expense (Income):						
Actual (return) loss on net assets	\$(2,924)	\$(5,154)	\$(5,472)	\$(4,388)	\$3,160	\$4,832
Service cost-benefits earned during period	1,164	746	975	616	887	927
Interest cost on projected benefit obligation	1,746	3,097	1,695	2,645	1,674	2,292
Net amortization and deferral	728	2,159	3,568	1,889	(5,492)	(7,443)
Employee contribution	—	(18)	—	—	—	(391)
Recognized actuarial loss	60	522	178	667	—	89
	<u>\$ 774</u>	<u>\$ 1,352</u>	<u>\$ 944</u>	<u>\$ 1,429</u>	<u>\$ 229</u>	<u>\$ 306</u>

A reconciliation of the funded status of the Company's defined benefit plans to amounts recognized in the Consolidated Balance Sheets is as follows:

	2004		2003	
	Domestic	Foreign	Domestic	Foreign
Fair value of plan assets	\$27,867	\$50,647	\$26,581	\$42,261
Projected benefit obligation	(31,675)	(65,439)	(28,407)	(54,987)
Funded status	(3,808)	(14,792)	(1,826)	(12,726)
Unrecognized loss from past experience	4,602	17,690	3,354	15,162
Unrecognized transition asset	(128)	—	(167)	(53)
Unrecognized prior service cost	610	295	689	332
Net amount recognized	<u>\$ 1,276</u>	<u>\$ 3,193</u>	<u>\$ 2,050</u>	<u>\$ 2,715</u>

Amounts recognized in the Consolidated Balance Sheets are as follows:

	2004		2003	
	<u>Domestic</u>	<u>Foreign</u>	<u>Domestic</u>	<u>Foreign</u>
Prepaid benefit cost	—	—	\$2,050	—
Accrued benefit liability	\$(807)	\$(7,495)	—	\$(6,835)
Intangible asset	610	295	—	332
Accumulated other comprehensive loss	<u>1,473</u>	<u>10,393</u>	<u>—</u>	<u>9,218</u>
	<u>\$1,276</u>	<u>\$3,193</u>	<u>\$2,050</u>	<u>\$2,715</u>

Weighted-average assumptions used to determine benefit obligations for years ended December 31:

	2004		2003	
	<u>Domestic</u>	<u>Foreign</u>	<u>Domestic</u>	<u>Foreign</u>
Discount rate	5.75%	5.40%	6.25%	5.57%
Rate of compensation increase	3.50%	3.64%	3.75%	3.76%

Weighted-average assumptions used to determine net periodic benefit cost for years ended December 31:

	2004		2003	
	<u>Domestic</u>	<u>Foreign</u>	<u>Domestic</u>	<u>Foreign</u>
Discount rate	6.25%	5.42%	7.00%	5.56%
Expected long-term return on plan assets	8.75%	7.10%	9.00%	7.15%
Rate of compensation increase	3.75%	3.64%	4.00%	3.66%

The long-term rates of return on assets was selected from within the reasonable range of rates determined by (a) historical real returns for the asset classes covered by the investment policy, and (b) projections of inflation over the long-term period during which benefits are payable to plan participants.

At December 31, 2004, certain plan's accumulated benefit obligation exceeded the fair value of the respective plan assets. The total of such accumulated benefit obligation, projected benefit obligation and fair value of plan assets was \$85,684, \$96,137 and \$77,685, respectively.

At December 31, 2003, certain foreign plans' accumulated benefit obligation exceeded the fair value of the respective plan assets. The total of such accumulated benefit obligation, projected benefit obligation and fair value of plan assets, was \$47,088, \$52,949 and \$41,470, respectively.

As of December 31, 2004, the asset allocations of the Company's pension plans were as follows:

Asset Class:	<u>Domestic</u>	<u>Foreign</u>
Equity securities	65%	37%
Fixed income securities	7%	38%
Guaranteed investment contracts	11%	—
International equities	17%	20%
Other	—	5%
	<u>100%</u>	<u>100%</u>

The Company expects to contribute \$0 and \$65, respectively, to its domestic and foreign pension plans in 2005.

The following benefit payments, which reflect expected future service, as appropriate, are expected to be paid:

	<u>Domestic</u>	<u>Foreign</u>
2005	\$ 1,488	\$ 2,535
2006	1,506	2,612
2007	1,615	2,721
2008	1,756	2,821
2009 and thereafter	12,618	19,143

Additional information:

	<u>2004</u>		<u>2003</u>	
	<u>Domestic</u>	<u>Foreign</u>	<u>Domestic</u>	<u>Foreign</u>
Increase (decrease) in minimum liability included in other comprehensive income	\$1,473	\$1,175	\$0	\$(461)

10. INCOME TAXES

The provision for income taxes is summarized as follows:

	<u>Year Ended December 31</u>		
	<u>2004</u>	<u>2003</u>	<u>2002</u>
Current:			
U.S. Federal and State	\$ 503	\$ 42	\$ 156
Foreign	<u>1,386</u>	<u>3,301</u>	<u>1,762</u>
Total current	1,889	3,343	1,918
Deferred	<u>1,725</u>	<u>475</u>	<u>(1,286)</u>
Total	<u>\$3,614</u>	<u>\$3,818</u>	<u>\$ 632</u>

Effective Tax Rate

Income tax expense attributable to income from continuing operations differed from the amounts computed by applying the U.S. federal income tax rate of 34% to pretax income from operations as set forth in the following table:

	Year Ended December 31		
	2004	2003	2002
Tax at statutory rate	\$2,112	\$1,867	\$(369)
Tax effect of permanent differences	1,296	647	566
Revaluation of basis differences in subsidiary	1,280	—	—
State tax expense (benefit), net of federal benefit	(248)	(502)	245
Foreign tax credits	(422)	(115)	(130)
Adjustment to the deferred tax asset valuation allowance	(101)	1,979	32
International rate differences	(703)	(629)	—
Change in enacted tax rates	259	184	—
Other	141	387	288
Total	<u>\$3,614</u>	<u>\$3,818</u>	<u>\$ 632</u>

As of December 31, 2004, the Company had federal, state and foreign net operating loss carryforwards of \$72,049. Of these tax loss carryforwards, \$822 expire in 2005, \$267 expire in 2006, \$434 expire in 2007, \$897 expire in 2008, \$30,337 expire in 2009, and \$39,292 may be carried forward indefinitely.

Deferred income taxes arise due to certain items being includable in the determination of taxable income in periods different than for financial reporting purposes. The tax effect of significant types of temporary differences and carryforwards that gave rise to the Company's deferred tax assets and liabilities as of December 31, 2004 and 2003 follows:

	2004	2003
Deferred Tax Assets:		
Accrued expenses	\$ 1,139	\$ 1,399
Inventory	—	38
Capitalized income and expenditures	2,923	—
Accrued pensions	3,145	2,826
Tax loss carryforwards	12,214	13,478
Foreign tax credit carryforwards	306	1,614
Other	319	401
Gross deferred tax assets	20,046	19,756
Valuation allowance	(5,478)	(5,892)
	<u>14,568</u>	<u>13,864</u>
Deferred Tax Liabilities:		
Fixed assets	(5,624)	(3,619)
Prepaid pensions	—	(750)
Inventory	(381)	—
Investment in subsidiary	(5,712)	(5,296)
Other	(640)	(1,127)
	<u>(12,357)</u>	<u>(10,792)</u>
Net deferred tax assets	<u>\$ 2,211</u>	<u>\$ 3,072</u>

At December 31, 2003 and 2002, the valuation allowance related primarily to U.S. state and foreign tax loss carryforwards.

The Company intends to make distributions from its wholly-owned subsidiary in Hong Kong of earnings that have been previously taxed in the U.S. and can be distributed without any additional

taxes. With the exception of the Hong Kong subsidiary, U.S. income taxes have not been provided on the undistributed earnings (aggregating approximately \$42,606 and \$39,993 at December 31, 2004 and 2003, respectively) of the Company's foreign subsidiaries because such earnings are intended to be reinvested indefinitely. Future investment requirements in the respective non-U.S. jurisdictions are in excess of the undistributed foreign earnings. The determination of the unrecorded deferred tax liability with respect to undistributed foreign earnings was not practicable; however, any such U.S. tax liability would be substantially offset by U.S. foreign tax credits or tax loss carryforwards.

Income taxes paid were \$2,196, \$2,775, and \$1,517 for the years ended December 31, 2004, 2003 and 2002, respectively.

11. FUTURE MINIMUM RENTAL PAYMENTS

The future minimum rental payments required under operating leases that have initial or remaining noncancellable lease terms in excess of one year as of December 31, 2004 are as follows:

2005	\$3,176
2006	2,253
2007	1,304
2008	682
2009	509
2010 and thereafter	<u>22</u>
Total	<u>\$7,946</u>

Rent expense for 2004, 2003 and 2002 on operating leases aggregated \$3,565, \$3,439 and \$3,285, respectively.

12. COMMITMENTS AND CONTINGENCIES

The Company participates in certain payments in connection with Environmental Protection Agency consent orders related to certain hazardous waste cleanup activities under the federal Superfund statute. Cleanup activities at a Superfund site in which the Company is participating are in the final phase, which includes ongoing activities such as treatment of soil vapor extraction, biodegradation of contaminated subsurface soils and groundwater monitoring at the site. As of December 31, 2004 and 2003, the Company had accrued \$361 and \$434, respectively, for these activities. During 2004, 2003 and 2002, the Company paid \$73, \$84 and \$90, respectively, on Superfund activities. Additionally, there are various claims and pending actions against the Company and its subsidiaries arising out of the normal conduct of its business. While the outcome of these matters is currently not determinable, the Company's management does not believe that the resolution of these matters will have a material adverse impact on the Company's consolidated financial position, results of operations or cash flows.

At December 31, 2004 the Company had a letter of credit outstanding for \$250 which guarantees performance of certain trade activities. As of December 31, 2004, the Company does not have any significant commitments or guarantees that are not reflected in the accompanying financial statements or disclosed in the notes thereto.

13. FINANCIAL INSTRUMENTS AND CONCENTRATIONS OF CREDIT RISK

Credit risk represents the accounting loss that would be recognized at the reporting date if counterparties failed completely to perform as contracted. Concentrations of credit risk (whether on or off balance sheet) that arise from financial instruments exist for groups of customers or counterparties when they have similar economic characteristics that would cause their ability to meet contractual obligations to be similarly affected by changes in economic or other conditions. Financial instruments with potential credit risk include cash and cash equivalents, an interest rate hedge agreement and accounts receivable.

The Company maintains cash and cash equivalents with various major financial institutions. Concentrations of credit risk with respect to receivables are generally limited due to the Company's large number of customers and their dispersion across many countries and industries. At December 31, 2004 and 2003, the Company had no significant concentrations of credit risk.

The Company has entered into interest rate hedge agreements to change the fixed/variable interest rate mix of its debt portfolio thereby reducing the Company's aggregate risk to movements in interest rates. By using such derivative financial instruments to hedge exposures to changes in interest rates, the Company exposes itself to credit risk and market risk. Credit risk for these agreements is the risk that the counterparty might fail to fulfill its performance obligations under the terms of the derivative contract. Market risk is the risk that the value of a financial instrument might be adversely affected by a change in interest rates.

At December 31, 2004, the Company had the following interest rate hedge agreements in effect, under which it is reimbursed the excess of a variable rate above the stated fixed rate and is responsible for payment of the excess of a variable rate below the stated fixed rate:

Interest Hedge	Expiration Date	Notional Amount	Fixed Rate
US 3 month LIBOR	March, 2007	\$10,000	3.66%
US 3 month LIBOR	March, 2007	\$ 8,333	3.07%
3 month LIBOR	February, 2007	\$10,447	3.08%

The following disclosure of the estimated fair value of financial instruments is made in accordance with SFAS No. 107, "Disclosures about Fair Value of Financial Instruments." The estimated fair value amounts have been determined by the Company using available market information and appropriate valuation methodologies.

For short-term debt and long-term debt the rates currently available to the Company for debt with similar terms and remaining maturities are used to estimate the fair value for debt outstanding. At December 31, 2004 the fair value of such debt instruments approximates the carrying value.

The fair value of interest rate hedge agreements as of December 31, 2004 and 2003 was \$21 and \$0, respectively. In July 2001, a European interest rate hedge agreement with a notional amount of approximately \$16,550 at December 31, 2001 exchange rates was closed out for a pretax gain of \$480. In August 1999, a domestic interest rate hedge agreement with a notional amount of \$25,000 was closed out for a pretax gain of \$1,413. The gains have been amortized as a reduction of interest expense over the remaining years of the agreements, respectively, \$90, \$459 and \$485 were credited against interest expense in 2004, 2003 and 2002. As of December 31, 2004 and 2003, respectively, the unamortized gain, net of taxes, was \$0 and \$54.

14. RESTRUCTURING AND OTHER OPERATING EXPENSES

Restructuring and other operating expenses consists of the following:

	Year End December 31		
	2004	2003	2002
Restructuring charges:			
Severance costs	\$589	\$1,471	\$1,149
Facility closing costs	8	312	446
Total restructuring charges	\$597	\$1,783	\$1,595
Asset impairments	—	—	1,174
	<u>\$597</u>	<u>\$1,783</u>	<u>\$2,769</u>

Restructuring charges reflect streamlining and operational capacity realignments primarily in the U.S. and Europe resulting in the elimination of 33, 75, and 44 employee positions during 2004, 2003 and 2002, respectively, through primarily involuntary severance programs. At December 31, 2004, 2003 and 2002, respectively, \$109, \$277 and \$269 of severance related costs remained unpaid. The unpaid severance costs as of December 31, 2004 are expected to be fully paid by August, 2005. Facility closing costs include costs incurred to idle various facilities. Asset impairments in 2002 reflect a loss of \$674 on a building no longer in use and a loss of \$500 accrued for a facility disposed in 2003.

15. REDEMPTION VALUE OF WARRANTS

In conjunction with the issuance of the Company's Senior Subordinated Notes (the Notes) on January 18, 2002, warrants to purchase 7.5% of the then fully diluted outstanding common stock of the Company were issued to the holders of the Notes at a nominal exercise price, for an effective period of ten years. The warrant holders have the right to put the warrants or common stock received from exercise of the warrants, to the Company at the earlier of the fifth anniversary date, or upon occurrence of other events, such as a change in control of the Company. The Company has the right to call the warrants, or common stock issued from exercise of the warrants, at the end of the sixth year from the closing date of the issuance of the Notes. The put and call options are at a price equal to the greater of the fair market value, as determined by an independent appraiser, market value, or book value.

On January 1, 2004, the Company was required to adopt the SFAS 150 "Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity," and recorded a charge of \$2,423 as the cumulative effect of the change in the fair value of the warrants from the date of issuance through January 1, 2004. In addition, the value of the warrants at the date of issuance, \$4,467, was reclassified from additional paid-in capital, to a liability in accordance with the provisions of SFAS 150. During 2004, the Company recorded a charge of \$1,148 related to the change in fair value of the warrants during the year. This charge is recorded as a component of other expense in the consolidated statement of operations.

As a result of these changes and reclassifications, the Company has recorded a liability as of December 31, 2004 of \$8,039, which approximates the amount that would be paid, if the holders of the warrants or the Company exercised their put or call rights. As the warrants outstanding do not limit the amount that the Company may be required to pay to settle this obligation, the ultimate settlement could vary in future periods based on changes in the overall value of the Company.

REPORT OF INDEPENDENT AUDITORS

To the Board of Directors and Stockholders of Houghton International Inc.

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations, cash flows, changes in stockholders' equity and comprehensive income (loss) present fairly, in all material respects, the financial position of Houghton International Inc. and its subsidiaries at December 31, 2004 and December 31, 2003, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2004 in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

As discussed in Note 15, the Company adopted a new financial accounting standard for certain financial instruments with characteristics of both liabilities and equity during 2004.

PricewaterhouseCoopers LLP

Philadelphia, PA
March 24, 2005

DIRECTORS AND OFFICERS

CORPORATE OFFICERS

William F. MacDonald, Jr.
Chief Executive Officer

Daniel W. Fisher
Vice President - Houghton FLUIDCARE

Rosauro V. Holgado
Vice President - Technical Service

Thad L. Piatkowski
President - Houghton Metal Finishing

Jay C. Rohr
Controller

William J. Streich
Vice President - Finance, Secretary/Treasurer

Dr. Joseph F. Warchol
Vice President - Technical

Wesley D. Warner
Vice President - Human Resources

Joseph G. Wintsch
Vice President - Sales

BOARD OF DIRECTORS

The following listing reflects board composition as of March 31, 2005

John D. Brennan
Private Investor

Charles P. Connolly, Jr.
*Retired President and CEO,
First Union National Bank
Pennsylvania and Delaware*

Theodore G. Kaufman
Private Investor

William F. MacDonald, Jr.
Chairman of the Board and CEO

David W. Moser
*President
DFT Incorporated*

W. Lloyd Snyder III
*Principal, Snyder and Company
Chairman of the Board
Huff Paper Company*

Thomas A. Williams
Private Investor



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